

TECHNICAL MEMORANDUM

TO:	The City of Westminster
FROM:	Paige Koutelas and Jody Glennon, Olsson, Environmental Planning & Permitting
RE:	Environmental Field Survey Results for the City of Westminster’s Westminster Water 2025 Preliminary Design Project
DATE:	February 23, 2021
PROJECT #:	019-1378

Olsson completed an environmental field survey for the City of Westminster’s Westminster Water 2025 Preliminary Design Project (Project). The Project is located in Township 2 North, Range 69 West, Section 13 in Jefferson County, Colorado. The results of our desktop review (DTR) and environmental field survey are presented herein.

The Project will be designed and constructed to replace the City of Westminster’s aging Semper Water Treatment Facility (WTF) by 2025 to provide high quality drinking water now and into the future for the City’s service area. The Semper WTF is nearing the end of its planned lifecycle, therefore, the City is proactively planning for a new drinking WTF to meet the needs of current and future generations. The new WTF will use advanced technology to provide flexibility to be able to adapt to evolving regulatory standards, greater resiliency to address potential future water quality challenges, security to address future water supply needs through a phased approach to provide long-term treatment capacity, and opportunities for sustainability and environmental resource stewardship.

Overview

Olsson conducted an environmental field survey on June 24, 2020. Olsson’s survey was based on the WTF site depicted in **Figure 1, Attachment A**, as well as the DTR Olsson performed of the WTF site that was delivered to the City in February 2020 and revised in February 2021, and excluded review of appurtenant facilities that will connect to the site or be associated with it (e.g., raw and finished water pipelines). The Project is planned on private land (parcels 29-132-00-006 and 29-131-00-008; the owner of record of those parcels is R Dean Hawn Interests) and public land (parcel 29-133-99-002; the owner of record is the City of Westminster) (**Figure 2, Attachment A**). Olsson evaluated the following resources during the environmental field survey:

- Waters of the United States (WOUS),
- Waters of the State;

- Soils;
- Federal Emergency Management Agency (FEMA) 100-year floodplains in Jefferson County, Colorado;
- Regulated species under the federal Endangered Species Act (ESA) for Jefferson County, Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA), and Colorado Parks and Wildlife (CPW);
- Noxious weeds;
- Tree species, conditions, and specifications;
- Special recreation areas;
- Development and zoning; and
- Roadway considerations.

Additionally, stormwater permitting requirements were assessed.

WOUS Review

Our review of WOUS, soils, and FEMA data was conducted for the purpose of this reporting and included an assessment of the following:

- Aerial imagery of the proposed WTF site;
- Natural Resources Conservation Service (NRCS)-Soil Survey and hydric soils listing (NRCS 2020);
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USFWS 2020);
- Waters of the State;
- FEMA 100-Year floodplain review; and
- Jefferson County 100-Year floodplain review (county responsible for mapping).

Aerial imagery depicts the Project area on undeveloped private land and a small portion of City-owned land in abandoned agricultural fields, with Hylands Creek Open Space and Hylands Pond Open Space abutting the Project site to the east (**Figure 2, Attachment A**). A topographic review of the Project area corresponds with aerial imagery and indicates the area is relatively flat, sloping slightly north-northwest (**Figure 1, Attachment A**). The NWI data depict no wetlands or WOUS within the Project area. During the field survey, the entire WTF site was observed to identify potential wetlands or WOUS that were not identified as part of the DTR. No potential wetlands or WOUS were observed on site; therefore, Clean Water Act (CWA) Section 404 permitting is not anticipated to be required. No surface Waters of the State were identified within the Project area during Olsson's environmental field survey on June 24, 2020. One NWI mapped freshwater pond is located south of the Project area, which may serve as a stormwater infiltration or detention pond for surrounding

roadways. The Project area is not located within the FEMA 100-year flood zone (**Figure 3, Attachment A**) and, as such, will not require a City of Westminster Floodplain Development Permit.

One soil type was identified through the NRCS search within the Project area (**Figure 4, Attachment A**): Nunn-Urban land complex, 0 to 2 percent slopes. This soil type is not listed in the National Hydric Soils List for Jefferson County, Colorado (NRCS 2020). The Project area is classified as “Not Prime Farmland” by the NRCS.

Regulated Species Review

Olsson conducted a review of regulated species and their habitat on February 11, 2021. The review included an assessment of:

- CPW Non-Disclosure Agreement (NDA) data (CPW 2021)
- USFWS Information Planning and Consultation (IPaC) list of federal-listed species (USFWS 2021)

A total of seven federally listed threatened, endangered, or candidate species are listed for Jefferson County, Colorado (**Attachment B**). Habitat for federally listed species was reviewed using the abovementioned spatial data. Critical habitat has been designated for four of the listed species potentially occurring in Jefferson County, including Canada lynx (*Lynx canadensis*), piping plover (*Charadrius melodus*), whooping crane (*Grus americana*), and Mexican spotted-owl (*Strix occidentalis lucida*). Critical habitat has not been designated by the USFWS for Ute ladies'-tresses (*Spiranthes diluvialis*), western prairie fringed orchid (*Platanthera praeclara*), or pallid sturgeon (*Scaphirhynchus albus*). The Project area does not contain any mapped critical habitat for the aforementioned species; there is no mapped critical habitat within approximately 30 miles of the Project area.

No federally listed threatened and endangered species habitat was observed during Olsson’s site visit on June 24, 2020. An active prairie dog town, inhabited by black-tailed prairie dogs, was observed within the Project area during Olsson’s site visit, and prairie dog holes were abundant throughout the majority of the WTF site. Black-tailed prairie dogs are listed as a species of special concern by CPW, which is not a statutory category. Species of special concern include species which have been removed from the State threatened or endangered list within the last 5 years; are proposed for Federal listing (or are Federal listed “candidate species”) and are not already State listed; have experienced, based on available data, a downward trend in numbers or distribution lasting at least 5 years which may lead to a threatened or endangered status; or are otherwise determined to be vulnerable in Colorado, as determined by CPW. Burrowing owl habitat was observed within the Project area based on the presence of prairie dog burrows. Burrowing owls are listed as a state threatened species by CPW. CPW recommends a buffer of 0.125 mile around burrowing owl nests for human encroachment between March 15 and August 31, and a buffer of 0.25 mile around burrowing owl nests for industrial activities between March 15 and October 31. CPW also recommends that efforts to eradicate prairie dogs or destroy abandoned towns not occur



between March 15 and October 31 when burrowing owls may be present. Based on these recommendations, Olsson suggests prairie dog towns be eradicated and abandoned prairie dog towns be destroyed between October 31 and March 15. If activities to eradicate prairie dogs or destroy abandoned towns are scheduled to occur between March 15 and October 31, burrowing owl surveys are recommended to determine if burrowing owls are occupying the prairie dog town to prevent potential impacts to burrowing owls and their habitat.

If the final Project design, construction, operation, and/or maintenance result in consumptive use of waters from the South Platte River basin, federally listed species associated with the South Platte River may be impacted by the Project, and coordination with the USFWS will be required prior to construction. Olsson understands the Project will be designed and constructed to replace the City of Westminster's aging Semper WTF and that through this replacement of infrastructure, no new or additional uses of water are proposed; as such, coordination with the USFWS is not anticipated to be required.

In consideration of the BGEPA, CPW bald eagle and raptor nest NDA data were reviewed within a 0.50-mile buffer of the proposed Project area. No CPW raptor nests are mapped within 0.50 mile of the Project area and no active raptor nests were observed within 0.50 mile of the Project area during Olsson's site visit on June 24, 2020. Multiple dilapidated nests were observed on site, none of which had raptor nest activity during Olsson's approximate 7-hour site visit. Two red-tailed hawks were observed soaring over the Project area during the site visit, but were not observed perched on any nearby trees. It is likely that raptors feed on black-tailed prairie dogs on the Project site.

The Project area is located within a bald eagle roost site and bald eagle winter range. CPW recommends a 0.25-mile buffer for human encroachment for bald eagle winter night roosts between November 15 and March 15 if there is no direct line of sight between the roost and encroachment activities, and a 0.50-mile buffer for human encroachment for a bald eagle winter night roost if there is a direct line of sight between the roost and encroachment activities. Because the Project site is within a bald eagle roost site, the City should assume the site will be considered within direct line of sight of the roost and that the 0.50-mile buffer will apply for encroachment activities between November 15 and March 15. CPW should be consulted for staff opinion. If periodic visits are required within the buffer zone after development, activities should be restricted to the period between 10:00 AM and 2:00 PM between November 15 and March 15. There are no CPW recommended buffers or timing restrictions for bald eagle winter range. Raptors in Colorado typically start nesting in early spring and leave the nest mid to late summer, depending on the raptor species. Olsson recommends clearing trees within the Project site between September 1 and November 15 to prevent potential nesting activities occurring on site during the nesting season the following year. If tree clearing is to occur between November 15 and September 1, Olsson recommends an additional raptor nest survey to verify if any new nests have been established within the Project area.

The MBTA provides protections for migratory birds. The act makes it unlawful to pursue, hunt, take, capture, kill, or sell birds listed as migratory birds without a waiver to do so. The MBTA also grants

full protection to any bird parts including feathers, eggs, and nests. Incidental take is currently prohibited under the MBTA. “Incidental take” is defined as take that results from an activity but is not the purpose of that activity. No permits are needed to destroy inactive nests (i.e., nests without eggs or chicks) or conduct activities near an active nest. However, damaging or disturbing active nests is not considered “incidental” and requires a permit from the USFWS prior to any clearing activities. Nesting season in Colorado is typically between April 1 and August 31. Should all land clearing for the Project be completed outside of this period, no MBTA surveys will be required. However, if the City intends to clear during nesting season, an MBTA survey should be performed within one week of clearing of vegetation to prevent incidental take under the MBTA. Olsson suggests clearing trees between August 31 and April 1 to prevent take under the MBTA.

Noxious Weeds

Field bindweed (*Convolvulus arvensis*) was observed site wide during Olsson’s site visit on June 24, 2020. Additionally, Russian olive (*Elaeagnus angustifolia*), cheatgrass (*Bromus tectorum*), leafy spurge (*Euphorbia esula*), Canada thistle (*Cirsium arvense*), musk thistle (*Carduus nutans*), and hoary cress (*Lepidium draba*) were observed on site (**Figure 5, Attachment A**). Canada thistle, hoary cress, leafy spurge, musk thistle, and Russian olive are Colorado List B noxious weeds, and cheatgrass and field bindweed are Colorado List C noxious weeds. To comply with Title 35 Article 5.5, Colorado Noxious Weed Act, and as part of the City of Westminster’s planning and design for the Project, a Noxious Weed Management Plan will be developed. The Noxious Weed Management Plan for this Project will identify measures to prevent the introduction of noxious weeds on the Project site and prevent noxious weeds from becoming established in disturbed areas cleared in preparation for Project construction. The key objectives of the Noxious Weed Management Plan will include:

- Prevent the introduction of noxious weeds and control the growth of noxious weeds at the Project site.
- Meet the objectives of the Colorado Noxious Weed Act (Title 35, Agriculture, Article 5.5).
- Identify an integrated weed management approach for managing activities at the Project site.
- Develop response actions to noxious weed infestations.

The Colorado Noxious Weed Act was enacted to “ensure that all the lands of the state of Colorado, whether in private or public ownership, are protected by and subject to the jurisdiction of a local government empowered to manage undesirable plants as designated by the state of Colorado and the local governing body.”

Tree Species, Conditions, and Specifications

Tree species, conditions, and specifications were photographed (**Attachment C**) and recorded on site during Olsson’s June 24, 2020 site visit to assess which trees may require mitigation with the City. Conditions and specifications recorded included the health of the trees and diameter at breast height (DBH). Species that were recorded include: tree-of-heaven (*Ailanthus altissima*), white poplar

(*Populus alba*), plains cottonwood (*Populus deltoides*), peachleaf willow (*Salix amygdaloides*), crack willow (*Salix fragilis*), mahaleb cherry (*Prunus mahaleb*), lodgepole pine (*Pinus contorta*), and honey locust (*Gleditsia triacanthos*). Siberian elm (*Ulmus pumila*) and Russian olive (*Elaeagnus angustifolia*) were also observed on site, but not recorded due to their invasive nature. The following trees and tree group locations are shown on **Figure 5, Attachment A**. Where appropriate, tree counts with each measurement are listed in parentheses.

- Tree group 1 consists of tree-of-heaven trees, partially dead, and includes seven small trees with the following DBH measurements: 1.25 inches (in.), 1.25 in., 1.5 in., 2 in., 2.25 in., 3.5 in., and 5.25 in.
- Tree 2 is a mahaleb cherry tree, is partially dead, and has a DBH of 4.5 in.
- Tree group 3 consists of white poplars, healthy, and includes 45 small trees and saplings with the following DBH measurements: 0.5 in. (6), 0.75 in. (2), 1 in. (12), 1.25 in. (6), 1.5 in. (3), 1.75 in. (1), 2 in. (5), 2.25 in. (2), 2.5 in. (3), 2.75 in. (2), 3 in. (1), 5 in. (1), and 6.25 in. (1).
- Tree 4 is a plains cottonwood tree, is healthy, and has a DBH of 8.25 in.
- Tree 5 is a peachleaf willow, is healthy, and has a DBH of 7.5 in.
- Tree 6 is a crack willow, is partially dead, and has a DBH of 4.5 in.
- Tree group 7 consists of white poplars, partially dead, and includes 29 small trees and saplings with the following DBH measurements: 0.5 in. (3), 0.75 in. (2), 1 in. (7), 1.25 in. (3), 1.5 in. (4), 2.75 in. (1), 3.25 in. (1), 3.75 in. (1), 4 in. (1), 4.5 in. (1), 5.75 in. (1), 6 in. (2), 8.5 in. (1), and 9 in. (1).
- Tree 8 is a lodgepole pine tree, does not appear to be healthy, and has a DBH of 8.25 in.
- Tree group 9 consists of honey locust trees, healthy, and includes 19 small trees and saplings with the following DBH measurements: 1.75 in. (1), 2 in. (3), 2.25 in. (1), 2.5 in. (3), 2.75 in. (2), 3 in. (1), 3.5 in. (4), 3.75 in. (2), 4 in. (1), and 5.25 in. (1).
- Tree 10 is a plains cottonwood tree, is healthy, and has a DBH of 11 in.
- Tree 11 is a plains cottonwood tree, is healthy, and has a DBH of 6.5 in.
- Tree 12 is a plains cottonwood, is healthy, and has a DBH of 11 in.
- Tree group 13 consists of tree-of-heaven trees, healthy, and includes 12 small trees and saplings with the following DBH measurements: 0.75 in. (2), 1 in. (4), 1.75 in. (1), 2 in. (1), 2.25 in. (2), 3 in. (1), and 3.25 in. (1).

Coordination with the City of Westminster is recommended to determine the extent and type of tree mitigation that may be implemented for the removal of healthy, non-invasive trees that were recorded during Olsson's site visit. If removal of the following trees is required as part of the Project design, the City will discuss appropriate mitigation, if any:

- Two trees within Tree group 3
- Tree 4
- Two trees within Tree group 9
- Tree 10
- Tree 11
- Tree 12

Special Recreation Areas

The Project site abuts Hylands Creek Open Space and Hyland Ponds Open Space to the east (**Figure 2 Attachment A**). Lower Hylands Creek Open Space, to the south of the Project site, will also not be impacted as it lacks any direct connection to the site.

Development and Zoning

According to the City of Westminster Comprehensive Plan, the Project site is within the Church Ranch Focus Area and is located within the Central Area designation. The Project site is within Mixed Use Center and abuts Hylands Creek Open Space and Hyland Ponds Open Space to the east. The Project site is zoned O-1 Open/Agricultural in Jefferson County. Within an O-1 zoning area, general uses, including public utilities and all uses owned and operated by the City, are permitted.

Roadway Considerations

Access to the site will be from Westminster Boulevard, which bounds the west side of the site. Access configuration recommendations will be provided through the development of a Traffic Impact Study, which is being provided under separate cover. A City of Westminster right-of-way access permit(s) will be required for any access points that are being proposed. It is not anticipated that direct access to US Highway 36 to the west will be required; therefore, a Colorado Department of Transportation (CDOT) access permit should not be required. Depending on the selected raw water and finish water pipeline alignments, additional utility/special use permitting with CDOT may be required for any infrastructure encroachments into the US Highway 36 right-of-way.

Cultural Resources

AK Pioneer Consulting, LLC prepared a Class III Cultural Inventory that was submitted under separate report cover to the City.

Closing

If the City of Westminster has questions about the information or recommendations presented herein, please contact Paige Koutelas at pkoutelas@olsson.com/970.635.3724, or Jody Glennon at



jglennon@olsson.com/720.219.7767.

References

Colorado Parks and Wildlife (CPW). 2021. Non-Disclosure Agreement (NDA) Raptor Nest Data.

Colorado Parks and Wildlife (CPW). 2020. Threatened and Endangered List. Accessed June 2020: <https://cpw.state.co.us/learn/Pages/SOC-ThreatenedEndangeredList.aspx>.

Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey. Accessed June 2020: <https://websoilsurvey.sc.egov.usda.gov/>.

Schalk, Joe. 2020. Personal e-mail communication between Joe Schalk, City of Westminster Code Compliance Coordinator, and Paige Koutelas, Olsson Biologist, regarding the City of Westminster's Tree Removal Policy.

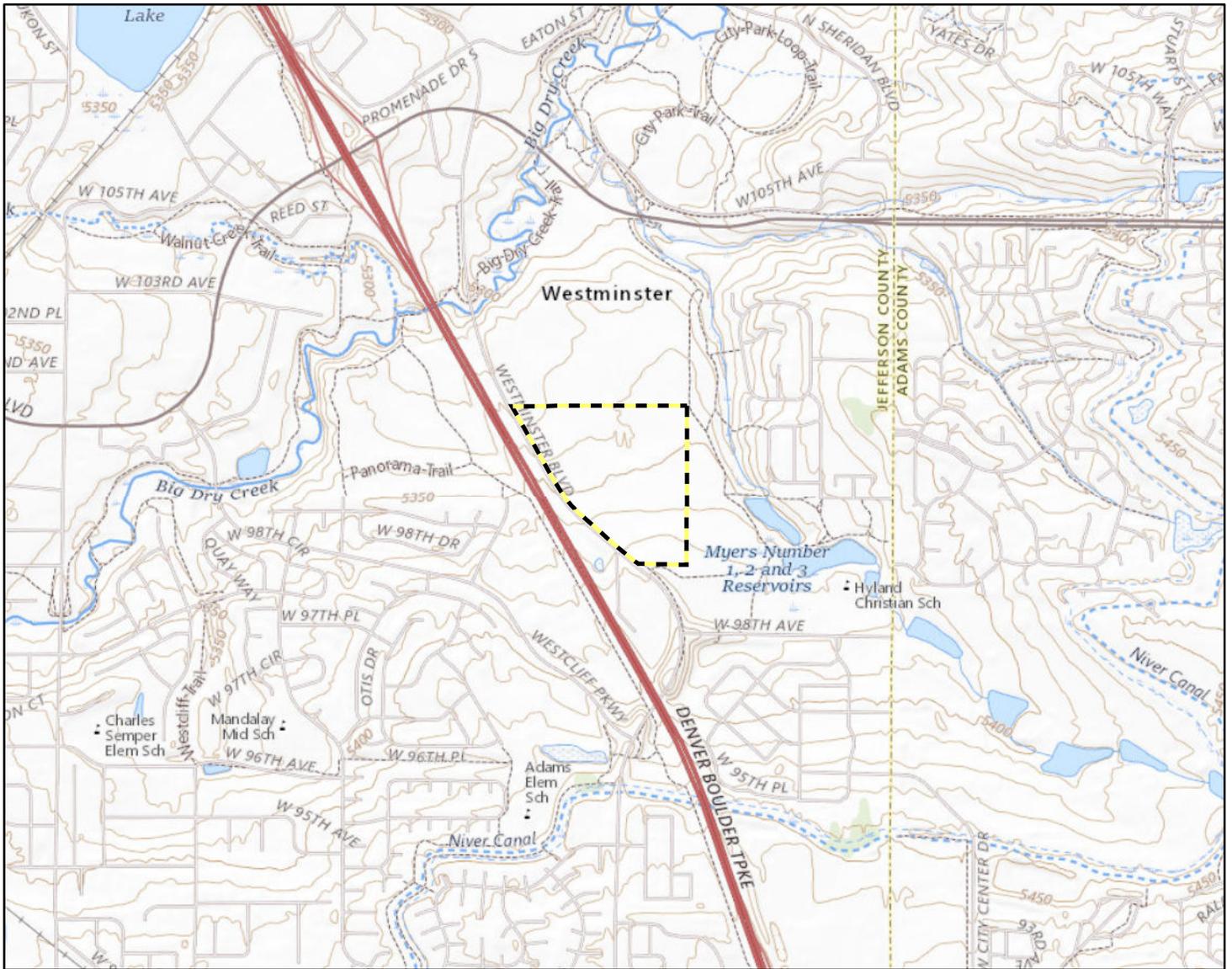
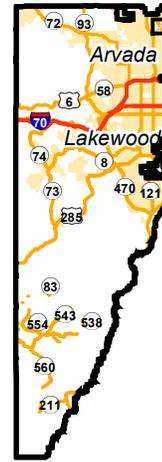
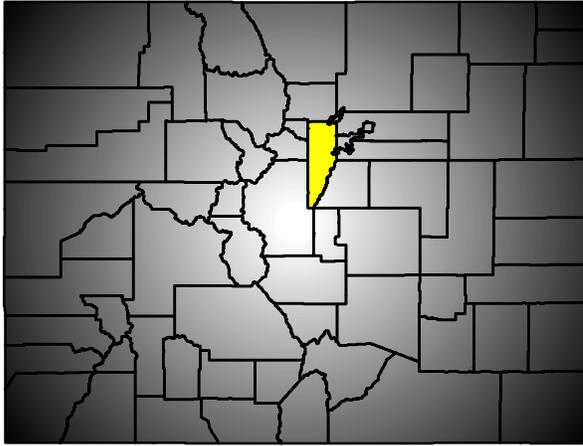
United States Fish and Wildlife Service (USFWS). 2020. National Wetlands Inventory. Seamless Wetlands Data Download. Accessed June 2020: <https://www.fws.gov/wetlands/Data/Data-Download.html>.

United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). USFWS Environmental Conservation Online System. Accessed February 2021: <https://ecos.fws.gov/ipac/>.

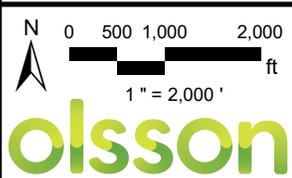
ATTACHMENT A
Figures

COLORADO

JEFFERSON COUNTY



F:\2019\1001-1500\019-1378\40-Design\GIS\20-06-29_NRP_L_Delineation Maps.mxd PUBLISHED BY: gmalek-madani DATE: March 02, 2021



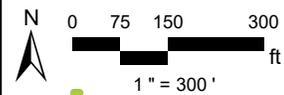
 Project Area

**Westminister Water 2025
Preliminary Design Project**
Habitat Survey Report
Westminister, Jefferson County, Colorado
Location Map
Figure 1



- Parcel Boundary
- Project Area
- Hyland Ponds Open Space
- Hylands Creek Open Space
- Lower Hylands Creek Open Space

*Gilpin, Boulder, Clear Creek, and Jefferson Counties Game Management Unit boundary out of frame.



Westminister Water 2025 Preliminary Design Project

Habitat Survey Report

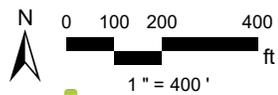
Westminister, Jefferson County, Colorado

Site Map

Figure 2



-  FEMA 100-yr Flood Zone
-  Project Area



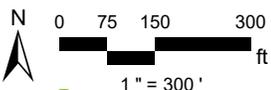
Westminster Water 2025 Preliminary Design Project
Habitat Survey Report
Westminster, Jefferson County, Colorado
FEMA Flood Zone Map
Figure 3

F:\2019\1001-1500\019-1378\40-Design\GIS\20-06-29_NRPL_Delineation Maps.mxd PUBLISHED BY: gmalek-madani DATE: March 02, 2021

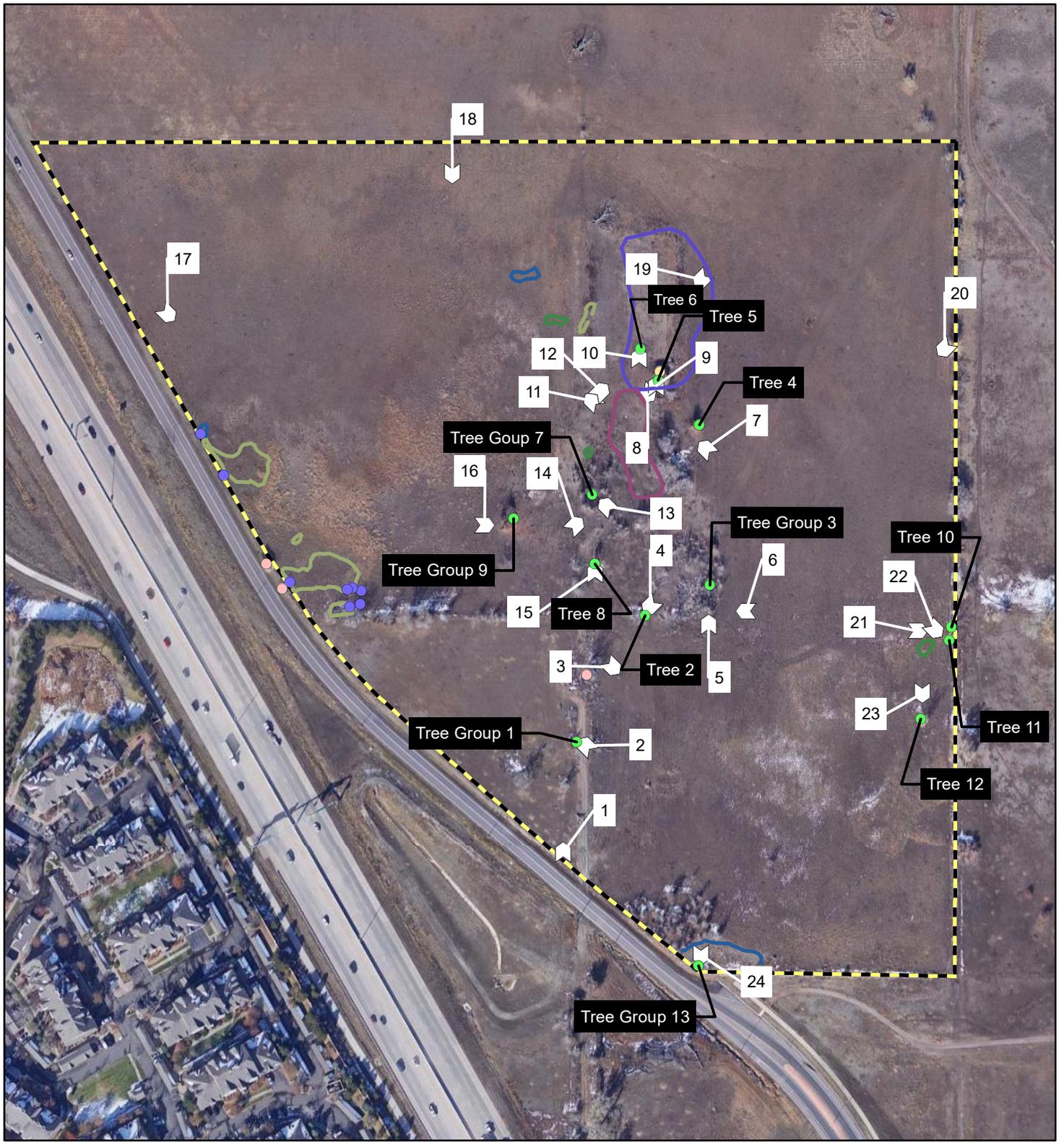


- SSURGO Soils
- Project Area
- Freshwater Emergent Wetland
- Riverine Habitat

***Soil Map Unit Symbol**
 105 - Nunn-Urban land complex, 0 to 2 percent slopes

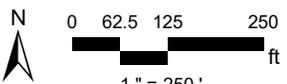


Westminster Water 2025 Preliminary Design Project
 Habitat Survey Report
 Westminster, Jefferson County, Colorado
NWI/SSURGO Soils Map
 Figure 4



- Russian Olive
- Dilapidated Nest
- Musk Thistle
- Tree
- Photo Point
- Project Area
- Canada Thistle
- Cheatgrass
- Cheatgrass, Canada Thistle, Leafy Spurge
- Hoary Cress
- Leafy Spurge

*Field bindweed was observed site-wide.



Westminster Water 2025 Preliminary Design Project
 Habitat Survey Report
 Westminster, Jefferson County, Colorado
Delineation Map
 Figure 5



ATTACHMENT B
USFWS IPaC Query Results



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:

February 11, 2021

Consultation Code: 06E24000-2020-SLI-1546

Event Code: 06E24000-2021-E-01238

Project Name: Westminster Water 2025 Preliminary Design Project

Subject: Updated 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: 06E24000-2020-SLI-1546

Event Code: 06E24000-2021-E-01238

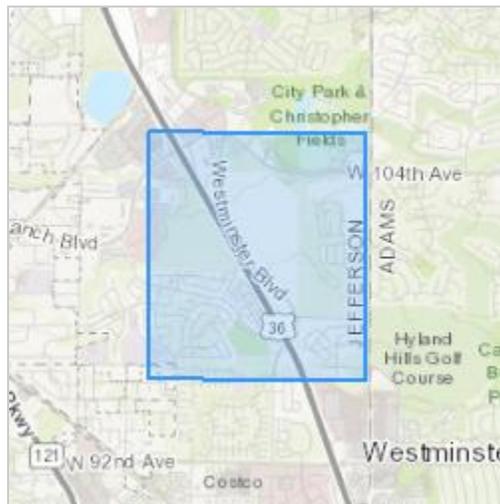
Project Name: Westminster Water 2025 Preliminary Design Project

Project Type: WATER SUPPLY / DELIVERY

Project Description: Proposed water treatment facility location.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.87904871393841,-105.06403669291257,14z>



Counties: Jefferson County, Colorado

Endangered Species Act Species

There is a total of 7 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
Canada Lynx <i>Lynx canadensis</i> Population: Wherever Found in Contiguous U.S. 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/3652	Threatened

Birds

NAME	STATUS
<p>Mexican Spotted Owl <i>Strix occidentalis lucida</i></p> <p>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/8196</p>	Threatened
<p>Piping Plover <i>Charadrius melodus</i></p> <p>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:</p> <ul style="list-style-type: none"> Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>Species profile: https://ecos.fws.gov/ecp/species/6039</p>	Threatened
<p>Whooping Crane <i>Grus americana</i></p> <p>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:</p> <ul style="list-style-type: none"> Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>Species profile: https://ecos.fws.gov/ecp/species/758</p>	Endangered

Fishes

NAME	STATUS
<p>Pallid Sturgeon <i>Scaphirhynchus albus</i></p> <p>No critical habitat has been designated for this species. This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>Species profile: https://ecos.fws.gov/ecp/species/7162</p>	Endangered

Flowering Plants

NAME	STATUS
<p>Ute Ladies'-tresses <i>Spiranthes diluvialis</i></p> <p>No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159</p>	Threatened
<p>Western Prairie Fringed Orchid <i>Platanthera praeclara</i></p> <p>No critical habitat has been designated for this species. This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>Species profile: https://ecos.fws.gov/ecp/species/1669</p>	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
Golden Eagle <i>Aquila chrysaetos</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/1680	Breeds Jan 1 to Aug 31

NAME	BREEDING SEASON
Lark Bunting <i>Calamospiza melanocorys</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 10 to Aug 15
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
Willow Flycatcher <i>Empidonax traillii</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/3482	Breeds May 20 to Aug 31

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 (|)

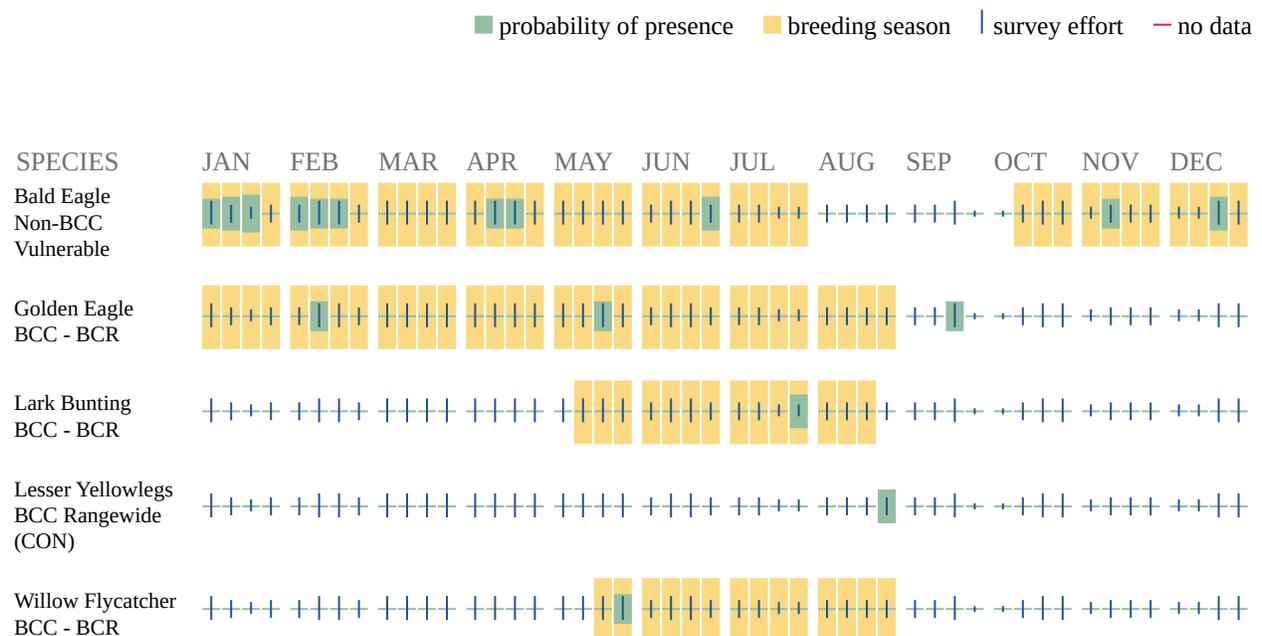
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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.

FRESHWATER POND

- [PABFx](#)
- [PUBF](#)
- [PUBFx](#)
- [PUBGx](#)

FRESHWATER EMERGENT WETLAND

- [PEM1A](#)
- [PEM1C](#)
- [PEM1Cx](#)

FRESHWATER FORESTED/SHRUB WETLAND

- [PSS1A](#)

RIVERINE

- [R5UBH](#)
-

ATTACHMENT C
Photographs

Habitat Survey - Photolog



Photo 1 – Looking northwest at Project area



Photo 2 – Looking northwest at Tree Group 1

Habitat Survey - Photolog



Photo 3 – Looking southeast at Project area



Photo 4 – Looking southwest at Tree 2

Habitat Survey - Photolog



Photo 5 – Looking north at Tree Group 3



Photo 6 – Looking west at Tree Group 3

Habitat Survey - Photolog



Photo 7 – Looking northwest at Tree 4



Photo 8 – Looking southeast at Tree 5

Habitat Survey - Photolog



Photo 9 – Looking at dilapidated nest in Tree 5



Photo 10 – Looking north at Tree 6

Habitat Survey - Photolog



Photo 11 – Looking northwest at Project area



Photo 12 – Looking northeast at Project area

Habitat Survey - Photolog



Photo 13 – Looking northwest at Tree Group 7



Photo 14 – Looking northeast at Tree Group 7

Habitat Survey - Photolog



Photo 15 – Looking north at Tree 8



Photo 16 – Looking east at Tree Group 9

Habitat Survey - Photolog



Photo 17 – Looking southeast at Project area



Photo 18 – Looking south at Project area

Habitat Survey - Photolog



Photo 19 – Looking southwest at Project area



Photo 20 – Looking southwest at Project area

Habitat Survey - Photolog



Photo 21 – Looking east at Tree 10



Photo 22 – Looking southeast at Tree 11

Habitat Survey - Photolog



Photo 23 – Looking south at Tree 12



Photo 24 – Looking south at Tree Group 13