

## **APPENDIX C**

### **FISH, WILDLIFE, AND VEGETATION TECHNICAL MEMORANDUM (2018)**

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**Project Name:** Port of Moses Lake, Northern Columbia Basin Railroad Project,  
STB Finance Docket No. 34936, Moses Lake, Washington

**Subject:** Fish, Wildlife, and Vegetation Technical Memorandum  
Draft Supplemental EA, December 2018

**Prepared for:** Office of Environmental Analysis, Surface Transportation Board  
Federal Railroad Administration, U.S. Department of Transportation

**From:** Brooke O'Neill, PWS, Senior Biologist – Jacobs Engineering Group Inc.

**Copies to:** Diane Williams, Environmental Planner – Jacobs Engineering Group Inc.

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## INTRODUCTION

A Supplemental Environmental Assessment is being prepared for the Port of Moses Lake Northern Columbia Basin Railroad Project (NCBRP or Project) due to alignment modifications that have been proposed since the May 2009 Final EA and the Surface Transportation Board's (STB) authorization of the Project in August 2009. A severe economic downturn following STB's authorization delayed the Project and hampered efforts to secure funding. In 2015, the Project received state funding and the Port reinitiated design and planning efforts. In 2017, the Port obtained additional funding from the U.S. Department of Transportation (USDOT.) As part of the reinitiated design, and to reduce environmental and other impacts and increase the effectiveness of the Project, the Port is seeking modifications to the Original Alignment authorized in 2009 by the STB.

The purpose of this memorandum is to document the methods and findings used in the assessment of potential impacts of the Modified Alignment to fish, wildlife, and vegetation. Prior studies of this Project include the Draft Fish, Wildlife, and Vegetation Discipline Report prepared in November 2007 (herein referred to as the 2007 Discipline Report). The scope of this memo is to identify any changes to existing conditions, Project impacts, and the regulatory environment as they relate to fish, wildlife, and vegetation due to the alignment modifications and to identify any additional mitigation measures that may be warranted.

## Project Description

The Port of Moses Lake (Port) proposes to construct/rehabilitate approximately 10 miles of rail line to provide rail access to land designated and zoned for industrial uses in Grant County, Washington. The proposed rail line would build two new segments (Segment 1 and Segment 2) and rehabilitate an existing rail segment (Segment 3). Alignment modifications are proposed on only the Segment 1 and Segment 2 (Exhibits 1 and 2). The Project purpose, the anticipated railroad use and operation, and the construction methods have not changed from those approved by STB in 2009.

## Regulations

The proposed Project must comply with all applicable federal, state, and local regulations. As identified in the Discipline Report, these regulations consist of the following:

- National Environmental Policy Act (NEPA)
- Section 7 of the Endangered Species Act (ESA)
- Fish and Wildlife Coordination Act
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- State Environmental Policy Act (SEPA)
- Bald Eagle Protection Rules
- Fish Passage Law
- Shoreline Management Act
- Local comprehensive plans
- Local critical area ordinances

## Data Sources

Technical staff reviewed existing information on fish, wildlife, and vegetation, and habitat conditions in the project vicinity using the following sources:

- Information for Planning and Consultation (IPAC) database by USFWS
- Priority Habitats and Species (PHS) data provided by WDFW
- Washington Priority Habitats and Species List, August 2008 (Updated September 2018)
- Washington State Species of Concern List online (<https://wdfw.wa.gov>)
- SalmonScape database by WDFW ([www.wdfw.wa.gov](http://www.wdfw.wa.gov))
- The Washington Department of Natural Resources (WDNR) Natural Heritage Program (NHP) database
- Personal communications with the WDFW area habitat and wildlife biologists via phone and email.
- Aerial photographs available on Google Earth.
- Published literature, as cited below

## Study Area

Consistent with the prior methodology, the additional study area includes areas within 200 feet of the proposed alignment modifications for Segment 1 and Segment 2, as well as aquatic and riparian areas 0.5 mile downstream of the approved Crab Creek crossing in Segment 1. Segment 3 is not evaluated herein because no modifications are proposed to Segment 3.

## **AFFECTED ENVIRONMENT**

### **How does general land use differ due to the proposed alignments modifications?**

The proposed Modified Alignment is very similar to the alignment that was approved by STB in August 2009 ("Original Alignment"). Much of the Modified Alignment overlaps with the Original Alignment. The general land use is comprised of agricultural lands and industrial zoned land. The additional study area does not impact any new land use types.

### **How is vegetation different due to proposed realignments?**

The additional study area intercepts the same vegetation and habitats types as the prior study area. There are no significant changes to vegetation and habitat conditions in the additional study area. Common vegetation consists of row crops and non-native weed species. Wetland and riparian vegetation are present in Segment 1 at wetlands and the Crab Creek crossing.

The majority of upland habitat within the additional study area is highly modified for agricultural or commercial/industrial use. Like the prior study area, the site contains suitable habitat for nesting by ground birds, raptors, and burrowing owls.

Wetland and riparian habitat are found along Crab Creek in Segment 1 and in wetlands located on a western facing slope about ½ mile east of Crab Creek. The Crab Creek crossing area is designated by WDFW as priority areas for waterfowl concentrations and shorebird concentrations. Wetland and riparian habitats have been modified by human activities and contain poor water quality, a lack of dense native cover, and a large amount of weedy vegetation. Crab Creek is the largest riparian corridor draining to Moses Lake.

### **How has fish or wildlife presence changed since prior studies?**

#### **Federal Threatened or Endangered Fish**

Consistent with prior studies, no threatened or endangered (listed) fish species occur in the project study area. Anadromous fish, including listed salmonids, are located more than 15 miles south of the project, in Lower Crab Creek, south of the Potholes reservoir. Fish passage barriers in Lower Crab Creek preclude anadromous fish from reaching Parker Horn (WDFW, 2018a). Additionally, no critical habitat for listed fish species is designated in the project vicinity.

#### **Other special status Fish**

Prior studies identified four fish species in the prior study area that were designated as priority species by the State of Washington: walleye, largemouth bass, smallmouth bass, and rainbow trout. WDFW currently identifies these four fish species as present in Parker Horn and Crab Creek (WDFW, 2018b). Since the Project's 2007 Discipline Report, three of these fish species (all except for rainbow trout) have been removed from the state priority species list (WDFW, 2008) but continue to be considered important game species. Other game fish known to occur in Moses Lake include yellow perch, common

carp, smaller carp, black crappie, and others (Schmuck, 2014). Parker Horn/Crab Creek within the Project study area is important spawning habitat for walleye and other warm water game fish (Pentico, 2018a). Rainbow trout remains a state priority species and is present in the additional study area but is unlikely to spawn due to lack of suitable substrate (Pentico, 2018a)

### **Federal Threatened or Endangered wildlife**

The U.S. Fish and Wildlife Service (USFWS) identifies three federally listed wildlife species that have the potential to either occur in the Project vicinity or be affected directly or indirectly by activities in the Project vicinity. These species are the pygmy rabbit (endangered), the gray wolf (endangered), and the yellow-billed cuckoo (threatened). No critical habitat for listed wildlife species is designated in the project vicinity (USFWS, 2018).

Consistent with the previous analysis, no suitable habitat for pygmy rabbits exists in the additional study area and the pygmy rabbits is not expected to occur in the project vicinity (Pentico, 2018a). The gray wolf was not addressed in the prior studies. Gray wolves do not currently occur in Grant County and the nearest pack is in western Douglas County (Pentico, 2018a).

The yellow-billed cuckoo was listed as threatened in 2014 and was, therefore, not addressed in the prior studies. Yellow-billed Cuckoos migrate annually between their breeding range in North America and wintering grounds in South America (Wiles and Kalasz, 2017). They require relatively large (greater than 50 acres) contiguous patches of cottonwood and willow riparian habitat for nesting. They were once considered abundant along the Columbia River but are reported to no longer breed in Washington, Oregon, and British Columbia (Wiles and Kalasz, 2017). Woody riparian vegetation in the additional study area is very sparse and found in small patches and does not contain any substantial patches of willow or cottonwood. Suitable habitat for yellow-billed cuckoo does not exist in the additional study area.

Prior studies identified two species in Grant County that were candidates for listing under the federal ESA: greater sage grouse and Washington ground squirrel. Since then, both the greater sage grouse and the Washington ground squirrel have been removed from the candidate species list under the federal ESA but are protected under state regulations (WDFW, 2018c). Consistent with prior studies, no suitable habitat was identified for these species in the Project study area.

### **Other special status wildlife species**

The 2007 Discipline Report identified eight wildlife species designated as either federal species of concern or state priority species that may occur in the study area. In addition to these eight species, a nesting colony of Clark's grebe has been identified downstream of the proposed Crab Creek crossing in Segment 1.

Since prior studies, the protection status for several of these species has changed. The mink is no longer a state priority species. Yuma myotis is no longer considered a federal species of concern and has been removed from the state priority species list except where communal roosts are found. The bald eagle is no longer federally threatened and has been removed from the state priority species list but is still protected under the federal Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act. The burrowing owl and Townsend's big-eared bat are no longer federal species of concern but remain state candidate species. The northern leopard frog is no longer a federal species of concern but remains listed as a state endangered species (WDFW 2018b and 2018c). According the WDFW's wildlife biologist, Sean Dougherty, northern leopard frogs do not exist within the Project vicinity and will, therefore, not be impacted by the Project (Dougherty, 2018). Northern leopard frogs may be translocated to Crab Creek in the future (Dougherty, 2018).

**Table 1. Priority Wildlife Species Identified in the Prior Study Area and Additional Study Area**

| Wildlife Species         | Prior Status                                | Current Status                                  | Segment     |
|--------------------------|---------------------------------------------|-------------------------------------------------|-------------|
| Bald Eagle               | F: Monitor Species<br>S: Threatened         | F: Species of Concern<br>S: None                | 1 & 2       |
| Burrowing Owl            | F: Species of Concern<br>S: Candidate       | F: None<br>S: Candidate                         | 1 & 2       |
| Clark's Grebe            | Not Included in Prior Study                 | F: Bird of Conservation Concern<br>S: Candidate | 1           |
| Great Blue Heron         | F: None<br>S: Monitor Species               | F: None<br>S: Priority Breeding Colonies        | 1           |
| Northern Leopard Frog    | F: Species of Concern<br>S: Endangered      | F: None<br>S: Endangered                        | Not Present |
| Townsend's Big-eared Bat | F: Species of Concern<br>S: Candidate       | F: None<br>S: Candidate                         | 1 & 2       |
| Western Grebe            | F: None<br>S: Candidate                     | F: None<br>S: Candidate                         | 1           |
| Yuma myotis              | F: Species of Concern<br>S: Monitor Species | F: None<br>S: Priority Communal Roosts          | 1           |
| Mink                     | F: None<br>S: Priority Game Species         | F: None<br>S: None                              | 1           |

In 2007, WDFW identified a nesting colony of Clark's grebe in the additional study area, located in Crab Creek downstream of the proposed Segment 1 crossing (WDFW, 2018b). Clark's grebe is a state candidate species. Clark's grebe was not addressed in the prior studies. Information pertaining to the location of this nesting colony was likely not published or readily available at the time of the prior studies. The nesting colony is located about ¼ mile downstream from the project and south of Highway 17. Dougherty (2018) stated that both Clark's grebe and Western grebe commonly nest along Crab

Creek both downstream and upstream of Highway 17 and likely nest at or very near the Project's proposed Crab Creek crossing.

Consistent with the prior studies, the Crab Creek crossing is designated as state priority areas for waterfowl concentrations and shorebird concentrations that support large breeding populations of duck and Canada geese. Shorebird concentrations tend to occur in late summer and fall and include several species of dowitcher and yellowlegs (WDFW, 2018b).

### **How has the known occurrence of plant species and communities changed?**

#### **Federal Threatened or Endangered Plants**

Consistent with the previous analysis, no threatened or endangered plant species are known to occur in the additional study area.

#### **Other special status plants**

Previously, Piper's daisy was mapped by the Washington Natural Heritage Program (WNHP) as occurring near the eastern end of Segment 1. Piper's daisy is a rare plant and considered a state sensitive species. The 2007 Discipline Report states that field observations did not find suitable habitat for Piper's daisy and it was concluded that it did not occur in the Project area. Since then, the WNHP has revised their sensitive plant map to remove Piper daisy from the Project vicinity. No sensitive plant species or communities are identified by WNHP within the Project vicinity (WDNR, 2018).

### **How has Wildlife habitat connectivity changed?**

No significant changes have occurred to wildlife habitat connectivity in the Project vicinity.

### **PROJECT IMPACTS**

This section describes the changes in expected impacts to wildlife since the 2009 ROD.

The Project does not have the potential to impact northern leopard frogs because this species does not currently occur in or near the project.

The project does have the potential to impact Clark's grebe and Western grebe. Clark's grebe and Western grebe breed and forage in the study area and build floating nests anchored to emergent vegetation on shallow water in and along Crab Creek (Dougherty, 2018). These species are susceptible to nest abandonment, if disturbed. Construction activities associated with the proposed Crab Creek crossing are likely to visually and auditorily disturb any nesting grebes near the Project and could adversely affect Clark's and Western grebes if individuals abandon their nests due to Project disturbance. Potential impacts are limited to construction activity because, during operation, train traffic is expected to be infrequent enough to discount any impacts.

Clark's and Western grebes nest later in the season than many birds. The sensitive breeding season is June through August (Dougherty, 2018). If construction activities in Crab Creek and adjacent wetlands can be avoided during that period, the project will likely not have a significant impact on these species.

## **MITIGATION MEASURES**

### **Approved Mitigation Measures**

The 2009 ROD identifies nine mitigation measures to minimize impacts to fish, wildlife, and vegetation, as follows:

1. The Port shall abide by construction timing and guidelines stipulated by the Washington Department of Fish and Wildlife (WDFW) through the Hydraulic Project Approval (HPA). If there are differences between the measures in this Environmental Assessment and the conditions of the HPA, the HPA criteria shall apply.
2. The Port shall consult with the WDFW and comply with its applicable laws and regulations so that Project-related construction activities are conducted in a manner that avoids or minimizes impacts to birds and bats (roosting bald eagles, over-wintering waterfowl, migrating shorebirds, foraging bats, and nesting birds).
3. To minimize disturbance to wildlife and vegetation to the maximum extent possible, the Port shall limit construction activities, including staging areas and vehicle turnaround areas, to the right of way or within previously disturbed areas. Existing vegetation shall be preserved to the maximum extent possible.
4. To preserve water quality in aquatic or wetland habitat, the Port shall implement measures to prevent uncured concrete from coming into contact with surface waters, and all refueling shall occur more than 200 feet from a water body or wetlands.
5. The Port shall minimize the impacts that could result from over-water structures, such as the structure crossing Crab Creek. To minimize or avoid impacts to walleye spawning, the Port shall comply with measures specified by the WDFW. Such measures may include, but are not limited to, avoidance of work within the waters of Crab Creek/Parker Horn between April 1 and early July.
6. To minimize or avoid impacts to nesting burrowing owls, the Port shall:
  - a. Conduct a directed survey for burrowing owl nests within 0.5 miles of the areas to be disturbed by construction. Surveys should be done during the breeding season (April to June) and should abide by WDFW protocol. Survey results should be submitted to WDFW prior to the start of construction. If active nests or nests that could become active are located along the route, WDFW may require additional mitigation such as artificial burrow installations.
  - b. Avoid new construction work in areas within 0.5 miles of identified nesting areas close to Segment 1, Alternative 1A, and Segment 2, between February 15 and September 25. If construction activities take place during this period, then the Port shall consult with WDFW to ensure that construction activities are conducted in a manner that avoids or minimizes impacts to burrowing owls.

7. To minimize or avoid impacts to bald eagle roost trees, the Port shall locate the Project alignment and support areas, such as staging areas, away from roost trees. If clearing of any roost trees is required, the Port shall create artificial roosts in an appropriate site near the existing roost.
8. To preserve existing aquatic and moist site vegetation habitats for the northern leopard frog to the maximum extent possible, the Port shall minimize clearing activities and locate equipment staging areas in previously disturbed areas, to the extent possible. The Port shall mitigate impacts to northern leopard frog habitat that will be disturbed or removed as a result of this Project. Acceptable mitigation will be determined by the WDFW and may include funds and/or equipment and man-hours dedicated to efforts by the WDFW to create and enhance habitat on the designated northern leopard frog recovery area of the Potholes Reservoir Unit south of Interstate 90.
9. To minimize or avoid impacts to Yuma myotis and Townsend's big-eared bats, the Port shall install bat boxes (alternative bat roosting structures) to allow bat roosting near the Crab Creek crossing.

### **Changes to Mitigation Measures**

There are no construction or operation changes proposed. No new habitats, vegetation types, or sensitive plant species are found in the additional study area associated with the Segment 1 and Segment 2 alignment modifications. One new sensitive wildlife species (Clark's grebe) has been identified in Segment 1. One previously identified sensitive wildlife species (northern leopard frog) has been determined to not occur within the project vicinity. The Port proposes to implement the mitigation measures approved in the 2009 ROD except for measure number eight, as enumerated above. The Port proposes to remove mitigation measures related to impacting northern leopard frog because the project will not impact northern leopard frog.

## REFERENCES

- Google earth V 7.1.8.3036. 2017. Moses Lake, Washington, U.S.A. 47.129484° N, 119.278077° W. Eye Altitude 19955 ft. Copyright 2018 Google. <http://www.earth.google.com>. Accessed December 2018.
- Dougherty, S. 2018. Phone interview with Sean Dougherty, Wildlife Biologist for the Ephrata District at Washington Department of Fish and Wildlife by Brooke O'Neill, Biologist at Jacobs, December 10.
- Pentico, E. 2018a. Phone interview with Eric Pentico, Area Habitat Biologist at Washington Department of Fish and Wildlife by Brooke O'Neill, Biologist at Jacobs, December 5.
- Pentico, E. 2018b. Email from Eric Pentico, Area Habitat Biologist at Washington State Department of Fish and Wildlife to Brooke O'Neill, Biologist at Jacobs. December 6.
- Schmuck, M.R. 2014. Results from the 2013 Fall Walleye Index Netting (FWIN) Surveys in Washington State. Washington Department of Fish and Wildlife. Olympia. 48pp.
- Washington Department of Fish and Wildlife (WDFW). 2008. Priority Habitat and Species List. Olympia, Washington. 288pp. Updated September 2018. Available: <https://wdfw.wa.gov/conservation/phs/>. Accessed: November 30, 2018
- Washington Department of Fish and Wildlife (WDFW). 2018a. SalmonScape web map service. Olympia, Washington. Available: <http://apps.wdfw.wa.gov/salmonscape/>. Accessed December 4, 2018
- Washington Department of Fish and Wildlife (WDFW). 2018b. Priority habitats and Species GIS datasets. Olympia, Washington. Received September 25, 2018.
- Washington Department of Fish and Wildlife (WDFW). 2018c. Species of Concern. Olympia, Washington. Available: <https://wdfw.wa.gov/conservation/endangered/>. Accessed: December 3, 2018.
- Washington Department of Natural Resources (WDNR). 2018. Washington Natural Heritage Program Element Occurrences. GIS dataset. Olympia, Washington.
- Wiles, G. J., and K. S. Kalasz. 2017. Draft Status Report for the Yellow-billed Cuckoo in Washington. Washington Department of Fish and Wildlife, Olympia, Washington. 32+ iv pp.
- U.S. Fish and Wildlife Service (USFWS). 2018. Information for planning and consultation. Available: <https://ecos.fws.gov/ipac/>. Accessed: December 4, 2018.
- Washington State Department of Transportation (WSDOT). 2007. Washington State, Northern Columbia Basin Railroad Project, Draft Fish, Wildlife, and Vegetation Discipline Report. Prepared by HDR Engineering, Inc. and Jones and Stokes for WSDOT. November. 72 pp.

## **ATTACHMENTS**

Exhibit A. Segment 1

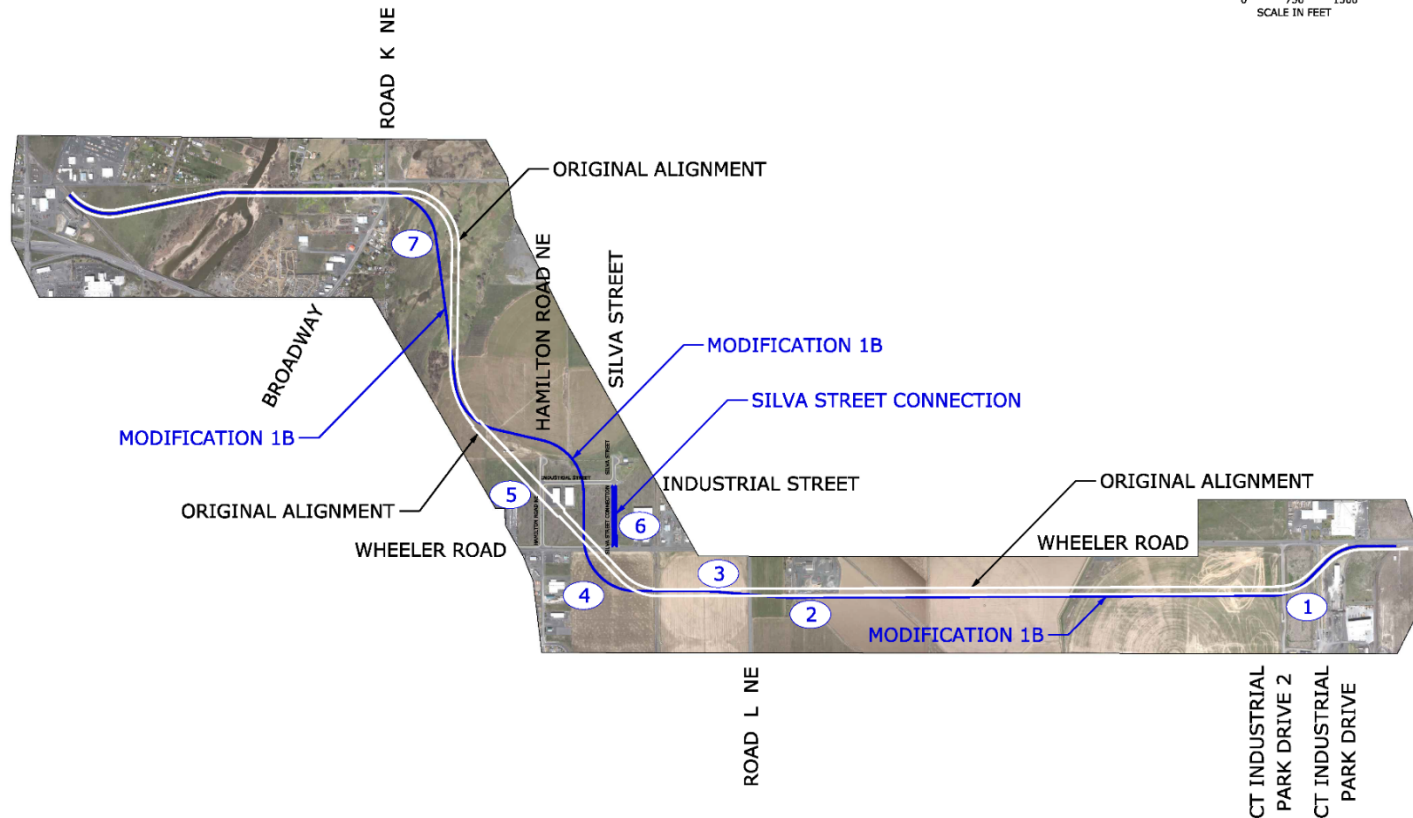
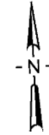
Exhibit B. Segment 2

IPaC Resource List

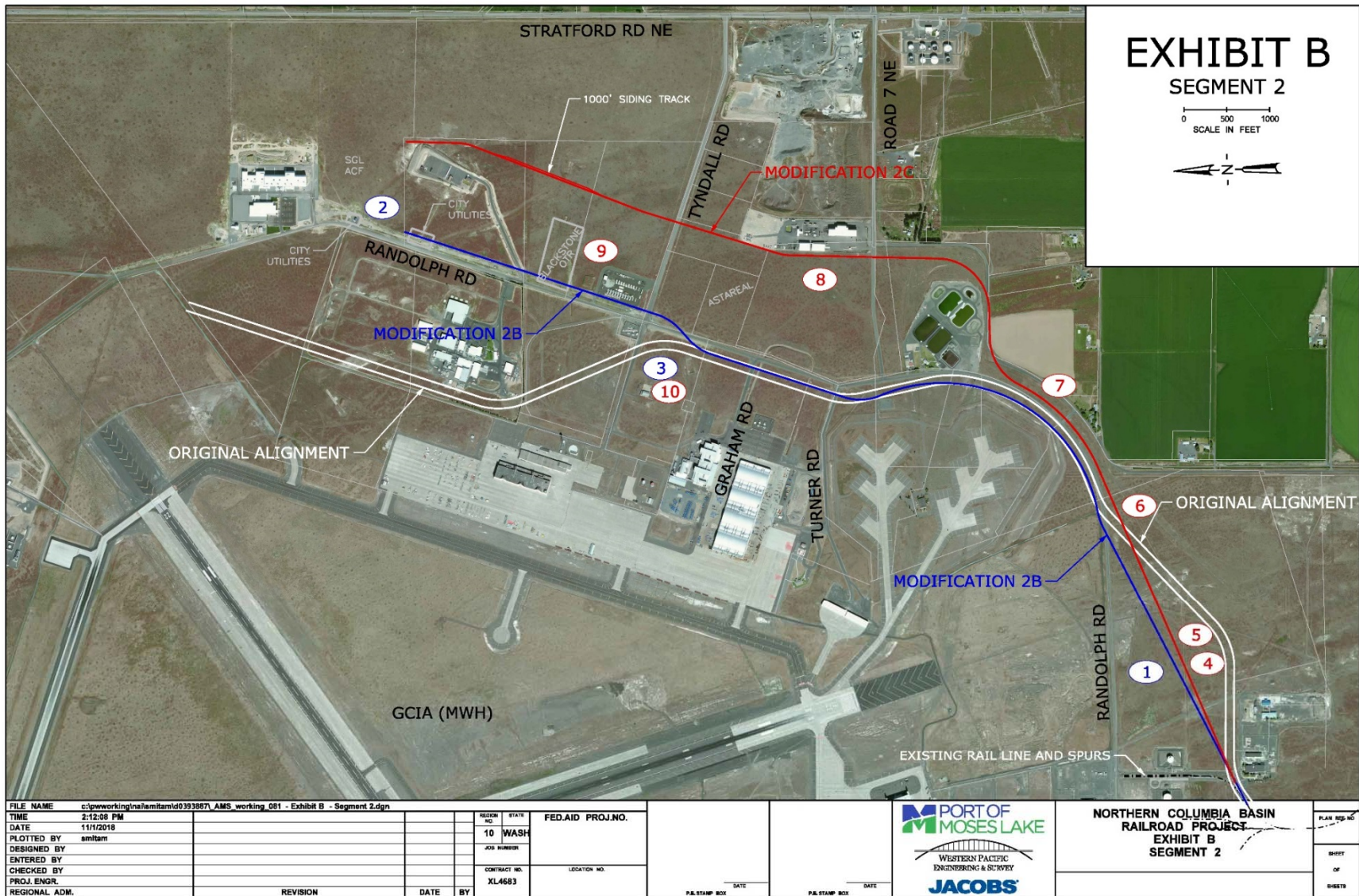
# EXHIBIT A

## SEGMENT 1

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SCALE IN FEET



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| FILE NAME c:\pwworking\hamilton\03938871_AMS_working_080 - Exhibit A - Segment 1.dgn |          |  |      | FED.AID PROJ.NO.    |              |                |      | NORTHERN COLUMBIA BASIN<br>RAILROAD PROJECT<br>EXHIBIT A<br>SEGMENT 1 |      | PLAN REF NO     |
| TIME 2:51:12 PM                                                                      |          |  |      |                     |              |                |      |                                                                       |      |                 |
| DATE 11/1/2018                                                                       |          |  |      | PROJ. NO. 10        | SCALE WASH   |                |      |                                                                       |      |                 |
| PLOTTED BY smitam                                                                    |          |  |      | JOB NUMBER          |              |                |      |                                                                       |      |                 |
| DESIGNED BY                                                                          |          |  |      | CONTRACT NO. XL4683 | LOCATION NO. |                |      |                                                                       |      |                 |
| ENTERED BY                                                                           |          |  |      |                     |              |                |      |                                                                       |      |                 |
| CHECKED BY                                                                           |          |  |      |                     |              |                |      |                                                                       |      |                 |
| PROJ. ENGR.                                                                          |          |  |      |                     |              |                |      |                                                                       |      |                 |
| REGIONAL ADM.                                                                        |          |  |      |                     |              |                |      |                                                                       |      |                 |
|                                                                                      | REVISION |  | DATE | BY                  |              | P.B. STAMP BOX | DATE | P.B. STAMP BOX                                                        | DATE | SHEET OF SHEETS |



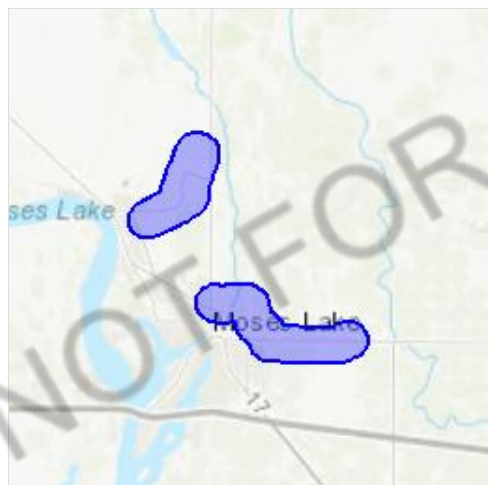
# IPaC resource list

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

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

## Location

Grant County, Washington



## Local office

Washington Fish And Wildlife Office

☎ (360) 753-9440

📠 (360) 753-9405

510 Desmond Drive Se, Suite 102  
Lacey, WA 98503-1263

<http://www.fws.gov/wafwo/>

# Endangered species

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

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

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

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

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

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

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

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

## Mammals

NAME

STATUS

Columbia Basin Pygmy Rabbit *Brachylagus idahoensis*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1126>Gray Wolf *Canis lupus*

Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.<https://ecos.fws.gov/ecp/species/4488>

## Birds

| NAME                                                                                                                                                                                                                                                       | STATUS     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Yellow-billed Cuckoo <i>Coccyzus americanus</i><br>There is <b>proposed</b> critical habitat for this species. Your location is outside the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a> | Threatened |

## Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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

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

Additional information can be found using the following links:

- Birds of Conservation Concern <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>

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 (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

#### Bald Eagle *Haliaeetus leucocephalus*

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 Dec 1 to Aug 31

#### Brewer's Sparrow *Spizella breweri*

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/9291>

Breeds May 15 to Aug 10

#### Clark's Grebe *Aechmophorus clarkii*

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

Breeds Jan 1 to Dec 31

**Lesser Yellowlegs** *Tringa flavipes*

Breeds elsewhere

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

<https://ecos.fws.gov/ecp/species/9679>

**Long-billed Curlew** *Numenius americanus*

Breeds Apr 1 to Jul 31

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

<https://ecos.fws.gov/ecp/species/5511>

**Marbled Godwit** *Limosa fedoa*

Breeds elsewhere

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

<https://ecos.fws.gov/ecp/species/9481>

**Olive-sided Flycatcher** *Contopus cooperi*

Breeds May 20 to Aug 31

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

<https://ecos.fws.gov/ecp/species/3914>

**Willow Flycatcher** *Empidonax traillii*

Breeds May 20 to Aug 31

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>

## 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

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 (■)

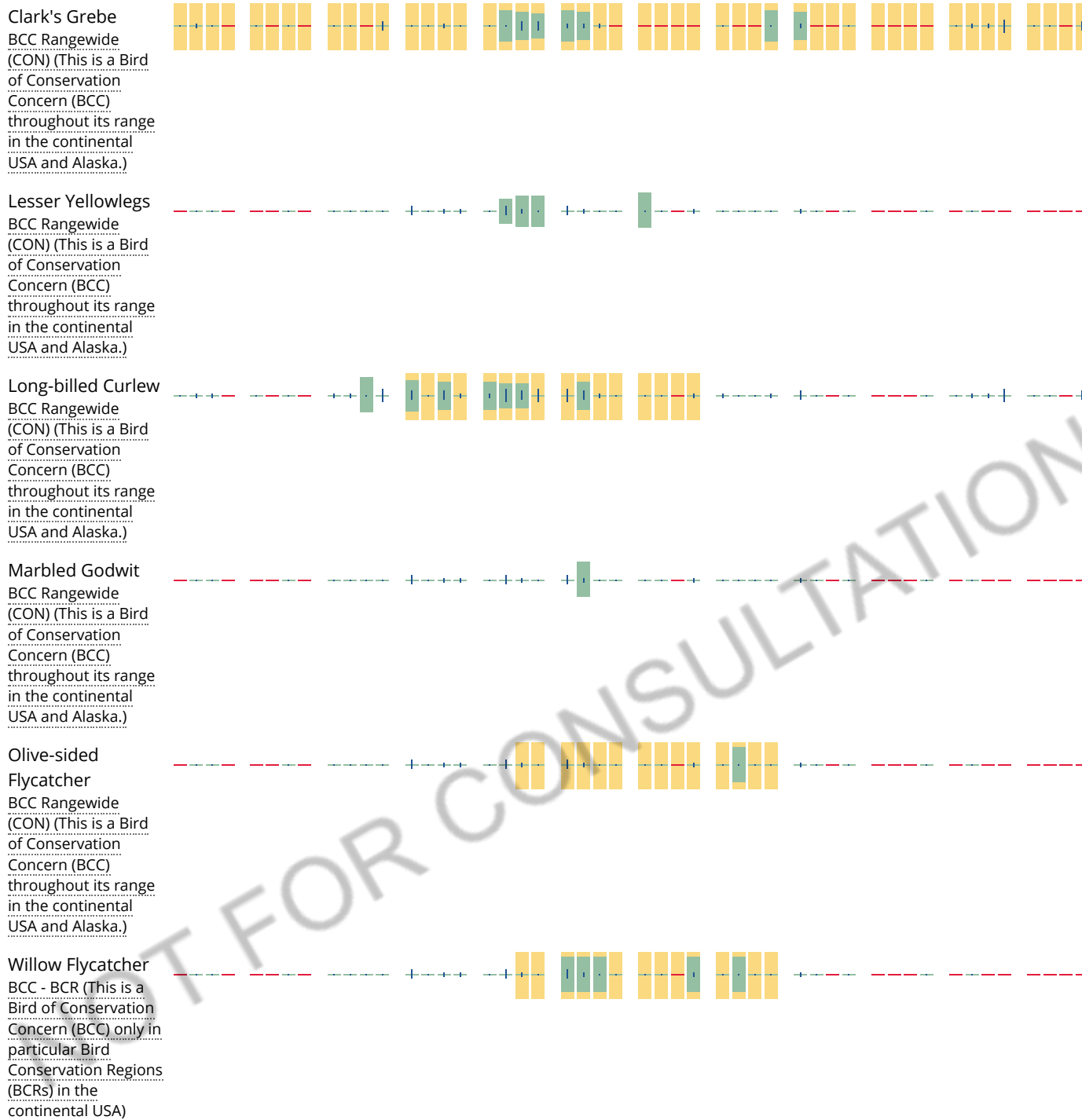
### Survey Effort (I)

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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

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.





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](#) and/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 [E-bird Explore Data Tool](#).

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

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

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

### **How do I know if a bird is breeding, wintering, 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.

## Facilities

### National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

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.

This location overlaps the following wetlands:

## FRESHWATER EMERGENT WETLAND

[PEM1C](#)

[PEM1F](#)

[PEM1A](#)

[PEM1Cx](#)

[PEM1Ax](#)

[PEM1/SS1A](#)

[PEM1Ch](#)

[PEM1/UBF](#)

## FRESHWATER FORESTED/SHRUB WETLAND

[PFO/EM1C](#)

[PFO1Ch](#)

## FRESHWATER POND

[PUBF](#)

[PUBHx](#)

[PUBFx](#)

[PUBH](#)

[PAB4F](#)

[PUBFh](#)

## LAKE

[L1UBH](#)

[L1UBHx](#)

[L2UBFx](#)

## RIVERINE

[R2UBHx](#)

[R4SBC](#)

[R4SBCx](#)

[R5UBH](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

## Data limitations

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

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

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

### **Data exclusions**

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

### **Data precautions**

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

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