

January 3, 2024

Jay C. Johnson

T 202.344.4698
jcjohnson@venable.com

Danielle Gosselin
Director
Office of Environmental Analysis
Surface Transportation Board
395 E Street, SW
Washington, DC 20423

Re: Docket No. FD 36500, CPKC Moravia Siding Project Update 2

Dear Ms. Gosselin:

I am writing to provide more information about CPKC's compliance with the Board's mitigation measures as they relate to the capital improvement project at Moravia, Iowa.

The mitigation measures included in the Board's approval of the CPKC merger require CPKC to "reexamine the USFWS list of threatened or endangered species" during "final design and engineering" of the capital improvement projects. "If the list has changed," or "if new information reveals that listed species or critical habitat could be affected by the capital improvements," CPKC must "consult with OEA and USFWS." *See* MM-Biological-02.

As described in my October 26, 2023 letter, final design and engineering of CPKC's capital improvement project at Moravia led to a change in the project's location. Based on that final design, CPKC not only reexamined the USFWS list of threatened or endangered species, it also considered whether any new information revealed that species on that list could be affected. Indeed, even apart from the Board's mitigation measures, CPKC had to address impacts to listed species as part of its pre-construction notification to the U.S. Army Corps of Engineers.

The attached report from November 17, 2023 has already been submitted to the Corps. The report finds, after a "reexamination" of USFWS's list of threatened or endangered species, "[n]o newly listed species or newly designated critical habitat." It also describes mitigation measures that will be used "so as not to affect [threatened and endangered] species and critical habitat." Relying on this report, CPKC concluded that the Board's mitigation measures do not require it to consult with OEA or USFWS.

Danielle Gosselin
January 3, 2024
Page 2

Because CPKC has filed a pre-construction notification with the Corps of Engineers for the Moravia capital improvement, the Corps is overseeing CPKC's compliance with the Endangered Species Act, as well as NEPA and Section 106 of the National Historic Preservation Act. The Board, by contrast, does not have permitting authority over the construction of the Moravia capital improvement. Its authority is instead limited to compliance with the merger mitigation measures. CPKC is complying with those measures, and it will continue to document its compliance in its quarterly reports.

Please feel free to contact me if you have any questions.

Sincerely,



Jay C. Johnson

Enclosures

cc: Elizabeth Webster
Joe Van Humbeck
Glen Wilson



November 17, 2023

Mr. Kyle Sumsion
Manager System Environmental Assessment
CPKC
427 West 12th Street
Kansas City, MO 64105

**RE: Threatened and Endangered Species Review
Proposed Moravia West Siding
Moravia, Iowa
Pinnacle Project No.: EM20226359**

Dear Mr. Sumsion:

Background Information

Pinnacle Engineering, Inc. (Pinnacle) conducted an environmental review of an approximately 34-acre proposed CPKC siding located in Sections 8, 9, and 17, Township 70 North, Range 17 West, in Appanoose County, Iowa between Lat: 40.885022°; Long: -92.826608° and Lat: 40.856153°; Long: -92.848783°, WGS 1984) (Site).

The Site consists of railroad right of way (ROW), wooded areas, creeks, agricultural fields, and wetland areas. Pinnacle previously completed a wetland delineation to determine the amount and type of wetlands present within the Site. The wetland delineation report will be attached to a wetland permit application to the U.S. Army Corps of Engineers (USACE) with a courtesy copy to the Iowa Department of Natural Resources (IDNR).

It should be noted that extensive environmental review of the area of this proposed siding location was conducted by the Surface Transportation Board's Office of Environmental Analysis Final Environmental Impact Statement; Docket No. FD36500 (FEIS) for the Kansas City Southern Railway and Canadian Pacific merger forming CPKC. Pinnacle reviewed the findings of the FEIS which indicated that "The Proposed Acquisition may affect but is not likely to adversely affect the federally endangered Indiana Bat, the federally endangered Northern Long-eared Bat, and the federally proposed endangered Tricolored Bat. Impacts on other biological resources would be negligible."

Pinnacle also reexamined the US Fish and Wildlife Service's (USFWS's) list of federal Threatened and Endangered (T&E) species, as recommended by OEA as an additional mitigation measure to mitigate impacts to biological resources. No newly listed species or newly designated critical habitat for the Site was identified from Pinnacle's review.

This report, which documents Pinnacle's review of the potential for T&E species, supports the application for a federal permit. This report also guides the timing of certain aspects of the construction of the project so as not to affect T&E Species and critical habitat and addresses CPKC's voluntary mitigation measures for the project.

Along with wetlands, Pinnacle reviewed the area for other Sensitive Natural Resources. The areas of Sensitive Natural Resources include Cultural Resources (i.e., parks, historic features), Protected Areas (i.e., Federal, State Tribal lands), Critical Habitat, and T&E Species.

The review did not identify historical areas, federal or state parks, federal and state managed lands, tribal lands, or critical habitat as defined by the U.S. Fish and Wildlife Service (USFWS) within the Site limits.

Federal Threatened and Endangered Species

Attached is a list of the federal T&E species that are identified as having the potential for being present or temporarily present in the vicinity of the Site and in Appanoose County, Iowa. The following list of T&E species in the area is compiled from the USFWS Service IPaC Website (see report in Attachment B). The IPaC review extended from the proposed siding to a one-mile radius from the proposed siding. The review identifies the species that are found in Appanoose County.

Below is a list of the T&E species identified in the internet search in the vicinity of the Site that are found on the IPaC website:

Appanoose County, Iowa T&E

Common Name	Scientific Name	Species Status
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	FE
Indiana Bat	<i>Myotis sodalis</i>	FT
Tricolored Bat	<i>Perimyotis subflavus</i>	PE
Monarch Butterfly	<i>Danaus plexippus</i>	C
Eastern Prairie Fringed Orchid	<i>Platanthera leucophaea</i>	FT

Species statuses include: FE = Federally Endangered, FT = Federally Threatened, PE = Proposed Endangered (Federal), PT = Proposed Threatened (Federal) C = Federal Candidate

The IPaC report did **NOT** identify critical habitat for the listed species in the vicinity of the Site.

The Northern Long-eared Bat prefers forested areas during the growing season and caves in which to roost outside of the growing season. There is potential for this habitat at and near the Site. Tree removal activities for the project should follow the outlines identified in Endangered and Threatened Wildlife and Plants; Threatened Species Status for the Northern Long-Eared Bat With 4(d) Rule and be limited to dates between November 1 and March 30. During the active season (April 1 to October 31) bridges, culverts, and other structures that require removal or alteration and that provide suitable habitat for the Northern Long-eared Bat should be inspected by a qualified biologist prior to work activities for the presence of bats. If the inspection identifies bats or evidence of bats, work will not commence until appropriate agency consultation is conducted.

The Indiana Bat require forests for foraging, preferred habitat are areas under the exfoliating bark of dead or dying trees that retain large, thick slabs of peeling bark. They like drainage areas that move into slow moving rivers. Indiana bats like to be close to water for drinking and an abundance of insects for food. There is potential for this habitat at and near the site. They typically go in into winter hibernation in October through April, although it may extend from September to May. They hibernate in caves or abandoned mine shafts (not found in Iowa). During the active season (April 1

to October 31) bridges, culverts, and other structures that require removal or alteration and that provide suitable habitat for the Indiana Bat should be inspected by a qualified biologist prior to work activities for the presence of bats. If the inspection identifies bats or evidence of bats, work will not commence until appropriate agency consultation is conducted.

The Tricolored Bat primarily roosts among live and dead leaf clusters of live or recently dead deciduous hardwood trees. In addition, tricolored bats have been observed roosting during summer among pine needles, eastern red cedar (*Juniperus virginiana*), within artificial roosts like barns, beneath porch roofs, bridges, concrete bunkers, and rarely within caves. This species prefers foraging most commonly over waterways and forest edges. There is potential for this habitat at and near the site. They typically go into winter hibernation in caves or abandoned mine shafts (not typically found in Iowa). During the active season bridges, culverts, and other structures that require removal or alteration and that provide suitable habitat for the Tricolored Bat should be inspected by a qualified biologist prior to work activities for the presence of bats. If the inspection identifies bats or evidence of bats, work will not commence until appropriate agency consultation is conducted.

The Monarch Butterfly is a Candidate T&E species (not yet listed). This species habitat includes native prairies but can be present where milkweed plants are present. North American Monarch Butterflies migrate to overwinter in Mexico and California. Due to the lack of native prairie habitat, and migratory patterns it is unlikely that these butterflies are located in the vicinity of the Site. Additionally, no milkweed plants were noted at the Site.

The USFWS Environmental Conservation Online System depicts the Site within the identified range of the Eastern Prairie Fringed Orchid. This species is associated with a sedge meadows, marshes or marsh edge ecosystem. The wet meadow, sedge meadow, and marsh wetlands adjacent and within the Site were minimal in size and were dominated by reed canary grass (*Phalaris arundinacea*) and included minimal amounts of sedge meadows or marshes. Based on this information, it is unlikely that the Eastern Prairie Fringed Orchid is found within the Site.

Bald and Golden Eagle Act

The Bald Eagle is protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668–668c). The Bald and Golden Eagles have no documented cases of being present at the Site, however, they may have favorable habitat within and adjacent the Site. A nest survey should be conducted prior to beginning work activities. Due to the majority of the Site being located in agricultural fields with little open water in the vicinity, it is unlikely that Bald or Golden Eagles would be located in the area.

Migratory Bird Act

Migratory birds are protected under the Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*). The IPaC identified birds that may breed in the area. Where practicable, the vegetation will be cleared in preparation for the construction of the siding before or after the breeding bird nesting season to avoid inadvertent removal of active nests (nesting adults, young, or eggs) and to ensure compliance with the Migratory Bird Treaty Act. Breeding bird nesting season for migratory birds depends on the beginning of spring in Iowa and south to where the birds winter. Signs of migration will be monitored to identify when the nesting season is beginning. If clearing is required during nesting season, CPKC will consult with the Office of Environmental Analysis and the local office of the US Fish and Wildlife Service on appropriate nest survey methods for the area of the site.

As mentioned previously in the discussion of the Northern long-eared Bat, Tricolored Bat and Indiana Bat, no tree cutting will occur between April 1 and October 31.

Summary Table

The table below lists the identified federal and state T&E species, the voluntary mitigation, and the proposed action for the identified species.

Common Name	Scientific Name	CPKC Voluntary Mitigation	Proposed Action
Northern Long Eared Bat	<i>Myotis septentrionalis</i>	VM 36, 37, 38, 39, 40, 41	No tree removal between April 1 and October 31. Tree removal limited to only necessary areas. When structures are to be removed, inspect, and consult with OEA and USFWS if evidence of use by bats. Inspect bridges and culverts prior to construction activities.
Indiana Bat	<i>Myotis sodalis</i>	VM 36, 37, 38, 39, 40, 41	No tree removal between April 1 and October 31. Tree removal limited to only necessary areas. When structures are to be removed, inspect, and consult with OEA and USFWS if evidence of use by bats. Inspect bridges and culverts prior to construction activities.
Tricolored Bat	<i>Perimyotis subflavus</i>	VM 36, 37, 38, 39, 40, 41	No tree removal between April 1 and October 31. Tree removal limited to only necessary areas. When structures are to be removed, inspect, and consult with OEA and USFWS if evidence of use by bats. Inspect bridges and culverts prior to construction activities.
Bald Eagle	<i>Haliaeetus leucocephalus</i>	VM 35, 50	Nest survey. Avoid nest removal during breeding season. Nest surveys required during season.
Migratory and Breeding Birds		VM 35	Nest survey. Avoid nest removal during breeding season. Nest surveys required during season.

CPKC has a no net loss of sensitive habitat area policy. The table below identifies types of sensitive habitat areas that are or may be in or adjacent to the Site.

Type of Sensitive Habitat	CPKC Voluntary Mitigation	Site Observation
Aquatic, Wetland, Riverine	VM 34, 42	Wetland delineation

		completed
Native Prairies	VM 34, 42	None identified
Old Growth Forest	VM 34, 42	None identified

Conclusion

This review supports the acquisition of federal permits and provides guidance for construction activities to address requirements for Threatened and Endangered Species, Bald Eagles, and migratory birds, and CPKC's voluntary mitigation measures. Any identification of a T&E species within the work areas during construction activities should be documented and the proper agency notified.

Should you have any additional questions or concerns regarding the project, feel free contact me at (612) 432-5590.

Sincerely,

PINNACLE ENGINEERING, INC.



Scott Thelen
Senior Scientist

Attachment A- Figures – Site location
Attachment B- USFWS IPaC Report

Attachment A- Figures

Attachment B- USFWS IPaC Report

IPaC resource list

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

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

Location

Appanoose and Monroe counties, Iowa



Local office

Illinois-Iowa Ecological Services Field Office

☎ (309) 757-5800

📅 (309) 757-5807

Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022

NOT FOR CONSULTATION

Endangered species

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

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

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

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

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

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

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

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

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

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

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

Insects

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

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid <i>Platanthera leucophaea</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/601	Threatened

Critical habitats

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

There are no critical habitats at this location.

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

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence 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). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

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

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

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

What 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. Please contact your local Fish and Wildlife Service Field Office if you have questions.

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 habitats³ 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:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

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
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25

Probability of Presence Summary

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

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

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

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

Breeding Season (■)

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

Survey Effort (|)

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.

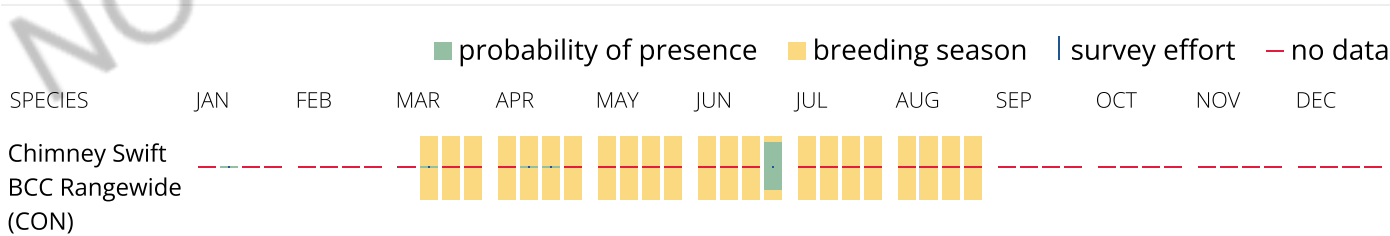
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



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

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

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

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

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

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

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

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

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go 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 or migrating in my area?

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

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

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

Facilities

National Wildlife Refuge lands

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

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

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

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

Wetland information is not available at this time

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

Data limitations

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

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

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

Data exclusions

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

Data precautions

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