

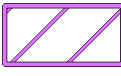
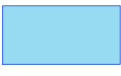




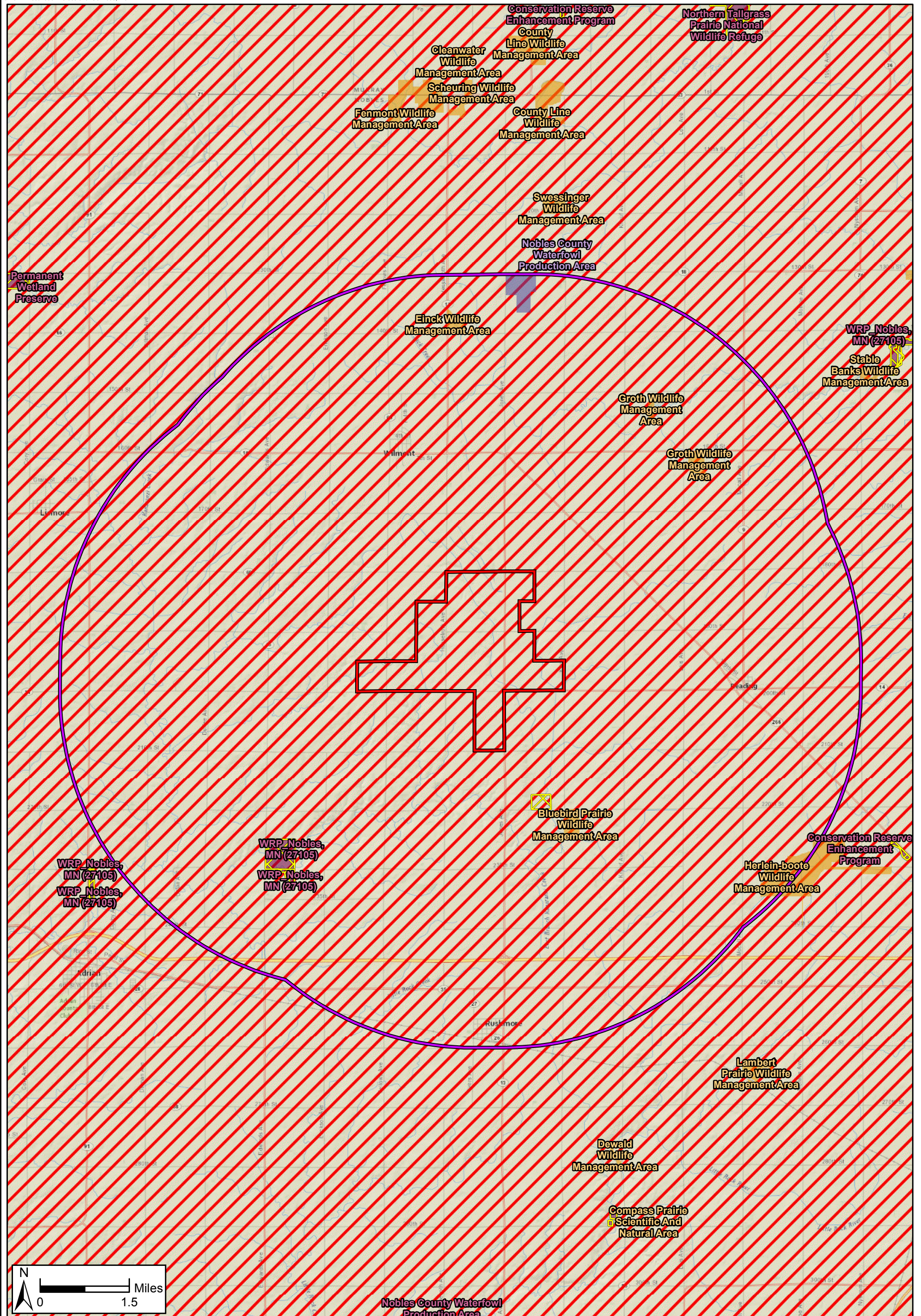
Data Source(s): Westwood (2021); ESRI WMS World Imagery Basemap (Accessed 2021); USGS NHD Dataset (2016); USFWS NWI (2016); MnDNR (2017).

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|---|------------------|---|--------------|
|  | Project Boundary |  | NWI Wetland |
|  | PWI Basin |  | NHD Flowline |
|  | PWI Watercourse |  | NHD Flowline |


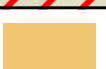







Community Wind South Repower Project

Nobles County, Minnesota

Wetlands and Waterways



Data Source(s): Westwood (2021); ESRI WMS National Geographic Basemap (Accessed 2020); Conservation Biology Institute PAD-US (2016); U.S. Census Bureau (2019); USFWS (2018); USGS (2014).

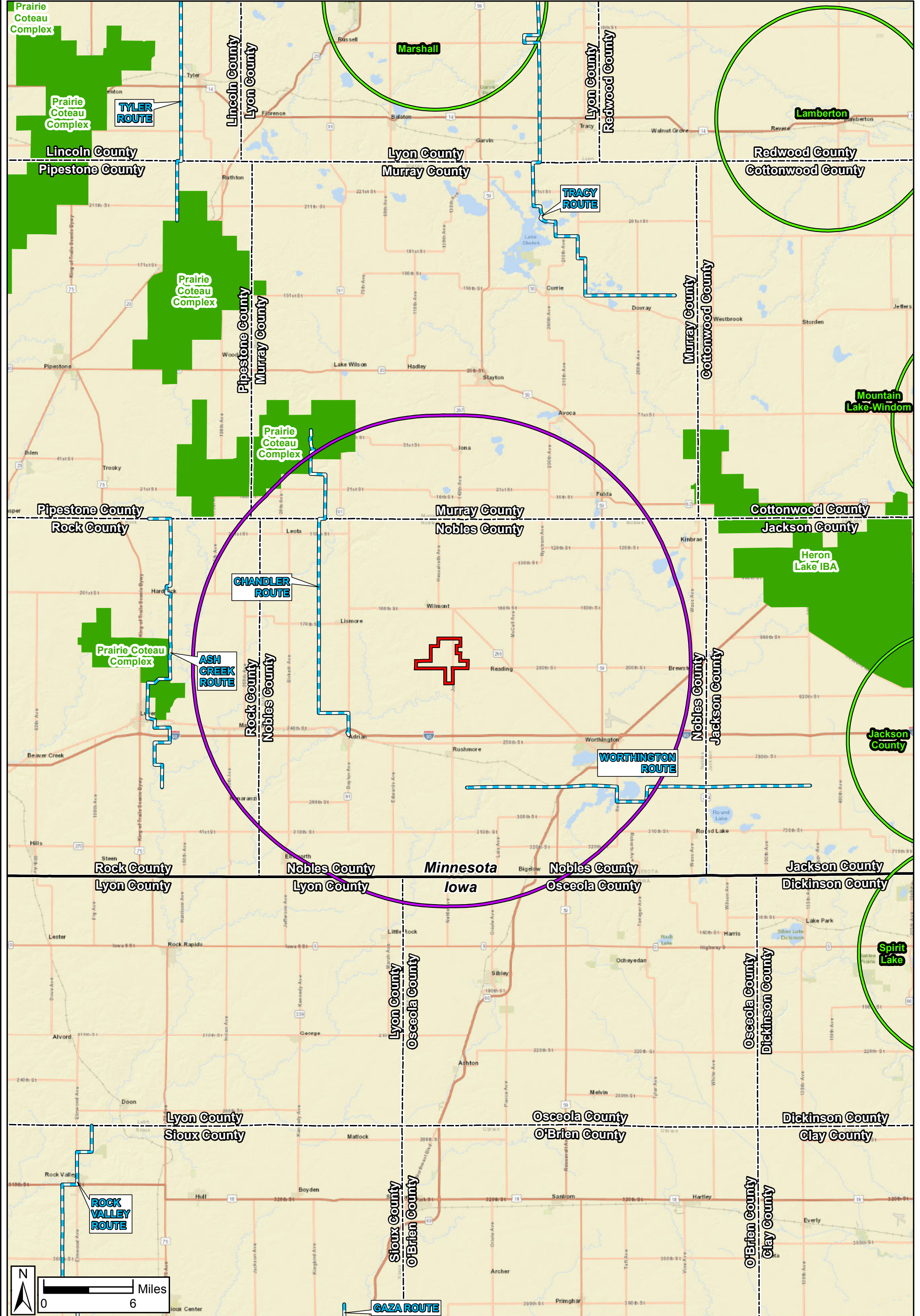
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|---|--------------------------------|---|-----------------------|---|-----------------------|
|  | Project Boundary |  | State Land |  | Conservation Easement |
|  | 5-Mile Buffer |  | American Indian Land | | |
|  | Topeka Shiner Critical Habitat |  | Local Government Land | | |
|  | Federal Land |  | Other Protected Land | | |

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Community Wind South Repower Project









Nobles County, Minnesota

Special Management Areas



Data Source(s): Westwood (2021); ESRI WMS World Streets Basemap (Accessed 2021); U.S. Census Bureau (2017); USGS (2014); National Audubon Society (2015; 2017).



- | | | | |
|---|----------------------|---|-------------|
|  | Project Boundary |  | Continental |
|  | 15-Mile Buffer |  | Global |
|  | County Boundary |  | State |
|  | Christmas Bird Count |  | BBS Routes |

Community Wind South Repower Project

Nobles County, Minnesota

Important Bird Areas, Breeding Bird Survey (BBS) Routes & Christmas Bird Counts

Appendix A

**Historic Records of Breeding and Non-Breeding Bird Species Detected Along
Nearby Breeding Bird Survey and Christmas Bird Count Routes (2013-2019)**

Species	Bird Survey		
	Chandler BBS	Worthington BBS	Jackson CBC
American Bittern <i>Botaurus lentiginosus</i>	X		
American Coot <i>Fulica americana</i>		X	
American Crow <i>Corvus brachyrhynchos</i>	X	X	X
American Goldfinch <i>Spinus tristis</i>	X	X	X
American Kestrel <i>Falco sparverius</i>	X	X	X
American Robin <i>Turdus migratorius</i>	X	X	X
American Tree Sparrow <i>Spizelloides arborea</i>			X
American White Pelican ^{3, 4} <i>Pelecanus erythrorhynchos</i>		X	
Bald Eagle ⁵ <i>Haliaeetus leucocephalus</i>		X	X
Baltimore Oriole <i>Icterus galbula</i>	X	X	
Bank Swallow <i>Riparia riparia</i>	X	X	
Barn Swallow <i>Hirundo rustica</i>	X	X	
Barred Owl <i>Strix varia</i>			X
Belted Kingfisher <i>Megaceryle alcyon</i>	X	X	X
Black Tern ^{4, 5} <i>Chlidonias niger</i>	X	X	
Black-billed Cuckoo ^{4, 5} <i>Coccyzus erythrophthalmus</i>	X		
Black-capped Chickadee <i>Poecile atricapillus</i>	X	X	X
Black-crowned Night-Heron ^{4, 5} <i>Nycticorax nycticorax</i>	X		
Blue Grosbeak <i>Passerina caerulea</i>	X	X	
Blue Jay <i>Cyanocitta cristata</i>	X	X	X
Blue-winged Teal <i>Anas discors</i>	X	X	
Bobolink ^{4, 5} <i>Dolichonyx oryzivorus</i>	X	X	
Brewer's Blackbird <i>Euphagus cyanocephalus</i>	X		
Brown Creeper <i>Certhia americana</i>			X

Species	Bird Survey		
	Chandler BBS	Worthington BBS	Jackson CBC
Brown Thrasher ^{4, 5} <i>Toxostoma rufum</i>	X	X	
Brown-headed Cowbird <i>Molothrus ater</i>	X	X	
Cackling Goose <i>Branta hutchinsii</i>			X
Canada Goose <i>Branta canadensis</i>	X	X	X
Cedar Waxwing <i>Bombycilla cedrorum</i>		X	
Chimney Swift <i>Chaetura pelagica</i>	X	X	
Chipping Sparrow <i>Spizella passerina</i>	X	X	X
Clay-colored Sparrow <i>Spizella pallida</i>	X		
Cliff Swallow <i>Petrochelidon pyrrhonota</i>	X	X	
Common Grackle <i>Quiscalus quiscula</i>	X	X	X
Common Yellowthroat <i>Geothlypis trichas</i>	X	X	
Cooper's Hawk <i>Accipiter cooperii</i>		X	X
Dark-eyed Junco <i>Junco hyemalis</i>			X
Dickcissel ^{4, 5} <i>Spiza americana</i>	X	X	
Double-crested Cormorant <i>Phalacrocorax auritus</i>		X	
Downy Woodpecker <i>Picoides pubescens</i>	X	X	X
Eastern Bluebird <i>Sialia sialis</i>		X	X
Eastern Kingbird <i>Tyrannus tyrannus</i>	X	X	
Eastern Phoebe <i>Sayornis phoebe</i>		X	
Eastern Screech-Owl <i>Megascops asio</i>			X
Eastern Wood-Pewee ^{4, 5} <i>Contopus virens</i>	X	X	
Eurasian Collared-dove <i>Streptopelia decaocto</i>	X	X	X
European Starling <i>Sturnus vulgaris</i>	X	X	X
Field Sparrow ^{4, 5} <i>Spizella pusilla</i>	X	X	

Species	Bird Survey		
	Chandler BBS	Worthington BBS	Jackson CBC
Forster's Tern ^{3, 4} <i>Sterna forsteri</i>		X	
Franklin's Gull ^{3, 4} <i>Leucophaeus pipixcan</i>		X	
Grasshopper Sparrow ^{4, 5} <i>Ammodramus savannarum</i>	X	X	
Gray Catbird <i>Dumetella carolinensis</i>	X	X	
Gray Partridge <i>Perdix perdix</i>	X		X
Great Blue Heron <i>Ardea herodias</i>	X	X	
Great Crested Flycatcher <i>Myiarchus crinitus</i>	X	X	
Great Horned Owl <i>Bubo virginianus</i>	X	X	X
Green Heron <i>Butorides virescens</i>	X		
Hairy Woodpecker <i>Picoides villosus</i>	X	X	X
Harris's Sparrow <i>Zonotrichia querula</i>			X
Hooded Merganser <i>Lophodytes cucullatus</i>	X		
Horned Lark <i>Eremophila alpestris</i>	X	X	X
House Finch <i>Haemorhous mexicanus</i>	X	X	X
House Sparrow <i>Passer domesticus</i>	X	X	X
House Wren <i>Troglodytes aedon</i>	X	X	
Indigo Bunting <i>Passerina cyanea</i>	X	X	
Killdeer <i>Charadrius vociferus</i>	X	X	
Lapland Longspur <i>Calcarius lapponicus</i>			X
Least Flycatcher ^{4, 5} <i>Empidonax minimus</i>	X		
Mallard <i>Anas platyrhynchos</i>	X	X	X
Marsh Wren ^{4, 5} <i>Cistothorus palustris</i>		X	
Merlin <i>Falco columbarius</i>			X
Mourning Dove <i>Zenaida macroura</i>	X	X	X
Northern Cardinal		X	X

Species	Bird Survey		
	Chandler BBS	Worthington BBS	Jackson CBC
<i>Cardinalis cardinalis</i>			
Northern Flicker <i>Colaptes auratus</i>	X	X	X
Northern Harrier ^{4,5} <i>Circus cyaneus</i>	X	X	X
Northern Rough-winged Swallow ^{4,5} <i>Stelgidopteryx serripennis</i>	X	X	
Northern Shrike <i>Lanius excubitor</i>			X
Orchard Oriole <i>Icterus spurius</i>	X	X	
Pileated Woodpecker <i>Dryocopus pileatus</i>			X
Purple Finch <i>Haemorhous purpureus</i>			X
Purple Martin ³ <i>Progne subis</i>	X	X	
Red-bellied Woodpecker <i>Melanerpes carolinus</i>			X
Red-breasted Nuthatch <i>Sitta canadensis</i>			X
Red-eyed Vireo <i>Vireo olivaceus</i>	X	X	
Red-headed Woodpecker ^{4,5} <i>Melanerpes erythrocephalus</i>	X	X	
Red-tailed Hawk <i>Buteo jamaicensis</i>	X	X	X
Red-winged Blackbird <i>Agelaius phoeniceus</i>	X	X	X
Ring-billed Gull <i>Larus delawarensis</i>		X	
Ring-necked Pheasant <i>Phasianus colchicus</i>	X	X	X
Rock Pigeon <i>Columba livia</i>	X	X	X
Rose-breasted Grosbeak ^{4,5} <i>Pheucticus ludovicianus</i>	X	X	
Rough-legged Hawk <i>Buteo lagopus</i>			X
Rusty Blackbird ⁴ <i>Euphagus carolinus</i>			X
Savannah Sparrow <i>Passerculus sandwichensis</i>	X	X	
Scarlet Tanager <i>Piranga olivacea</i>	X		
Sedge Wren ^{4,5} <i>Cistothorus platensis</i>	X	X	

Species	Bird Survey		
	Chandler BBS	Worthington BBS	Jackson CBC
Sharp-shinned Hawk <i>Accipiter striatus</i>			X
Short-eared Owl ^{3,4} <i>Asio flammeus</i>	X		
Snow Bunting <i>Plectrophenax nivalis</i>			X
Song Sparrow <i>Melospiza melodia</i>	X	X	X
Sora <i>Porzana carolina</i>	X	X	
Spotted Sandpiper <i>Actitis macularius</i>	X	X	
Swainson's Hawk ^{4,5} <i>Buteo swainsoni</i>	X		
Swamp Sparrow ^{4,5} <i>Melospiza georgiana</i>		X	
Townsend's Solitaire <i>Myadestes townsendi</i>			X
Tree Swallow <i>Tachycineta bicolor</i>	X	X	
Trumpeter Swan ^{3,4} <i>Cygnus buccinator</i>			X
Turkey Vulture <i>Cathartes aura</i>		X	
Upland Sandpiper ^{4,5} <i>Bartramia longicauda</i>	X	X	
Vesper Sparrow <i>Pooecetes gramineus</i>	X	X	
Warbling Vireo <i>Vireo gilvus</i>	X	X	
Western Kingbird <i>Tyrannus verticalis</i>	X		
Western Meadowlark <i>Sturnella neglecta</i>	X	X	
White-breasted Nuthatch <i>Sitta carolinensis</i>			X
White-throated Sparrow <i>Zonotrichia albicollis</i>			X
Wild Turkey <i>Meleagris gallopavo</i>	X	X	X
Willow Flycatcher ^{4,5} <i>Empidonax traillii</i>	X		
Wilson's Snipe <i>Gallinago delicata</i>	X	X	
Wood Duck <i>Aix sponsa</i>	X	X	
Yellow Warbler <i>Setophaga petechia</i>	X	X	

Species	Bird Survey		
	Chandler BBS	Worthington BBS	Jackson CBC
Yellow-billed Cuckoo <i>Coccyzus americanus</i>	X		
Yellow-headed Blackbird <i>Xanthocephalus xanthocephalus</i>	X	X	
TOTAL	85	85	58

¹ Minnesota Species of Concern, ² Minnesota Species of Greatest Conservation Need, ³ USFWS Birds of Conservation Concern.

Appendix B

USFWS Information for Planning and Consultation



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Minnesota-Wisconsin Ecological Services Field Office

4101 American Blvd E

Bloomington, MN 55425-1665

Phone: (952) 252-0092 Fax: (952) 646-2873

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>

In Reply Refer To:

July 30, 2021

Consultation Code: 03E19000-2021-SLI-1978

Event Code: 03E19000-2021-E-05961

Project Name: Community Wind South Repower Project

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

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species

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 may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife 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. 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. 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.

Consultation Technical Assistance

Please refer to the Midwest Region [S7 Technical Assistance](#) website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example ["No Effect" document](#) also can be found on the S7 Technical Assistance website.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain [Life History Information for Listed and Candidate Species](#) through the S7 Technical Assistance website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **No Effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example ["No Effect" document](#) also can be found on the S7 Technical Assistance website.
3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats

Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

This species hibernates in caves or mines only during the winter. In Minnesota and Wisconsin, the hibernation season is considered to be November 1 to March 31. During the active season (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
 - Any activity in or near the entrance to a cave or mine,
 - Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
 - Construction of one or more wind turbines, or
-

- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "[No Effect](#)" [document](#) also can be found on the S7 Technical Assistance website.

If any of the above activities are proposed, please use the northern long-eared bat determination key in IPaC. This tool streamlines consultation under the 2016 rangewide programmatic biological opinion for the 4(d) rule. The key helps to determine if prohibited take might occur and, if not, will generate an automated verification letter. No further review by us is necessary. Please visit the links below for additional information about "may affect" determinations for the northern long-eared bat.

[NLEB Section 7 consultation](#)

[Key to the NLEB 4\(d\) rule for federal actions that may affect](#)

[Instructions for the NLEB 4\(d\) assisted d-key](#)

[Maternity tree and hibernaculum locations by state](#)

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination

While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.

Minnesota

[Minnesota Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: Review.NHIS@state.mn.us

Wisconsin

[Wisconsin Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
 - Migratory Birds
-

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:

Minnesota-Wisconsin Ecological Services Field Office

4101 American Blvd E

Bloomington, MN 55425-1665

(952) 252-0092

Project Summary

Consultation Code: 03E19000-2021-SLI-1978

Event Code: 03E19000-2021-E-05961

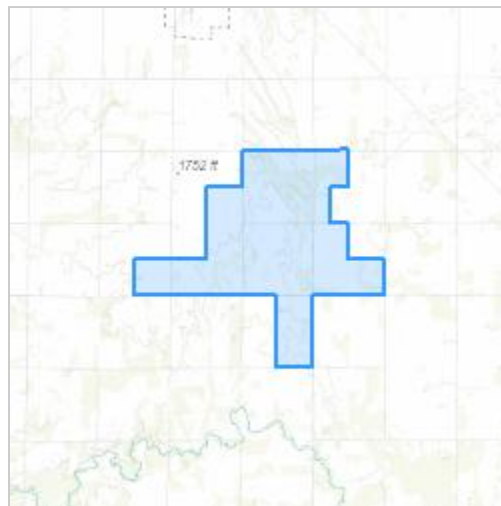
Project Name: Community Wind South Repower Project

Project Type: POWER GENERATION

Project Description: Wind Repower Project

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.710332550000004,-95.79823421099562,14z>



Counties: Nobles County, Minnesota

Endangered Species Act Species

There is a total of 3 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.

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
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Fishes

NAME	STATUS
Topeka Shiner <i>Notropis topeka</i> (=tristis) Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4122	Endangered

Flowering Plants

NAME	STATUS
Prairie Bush-clover <i>Lespedeza leptostachya</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4458	Threatened

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Topeka Shiner <i>Notropis topeka</i> (=tristis) https://ecos.fws.gov/ecp/species/4122#crithab	Final

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 Dec 1 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 (|)

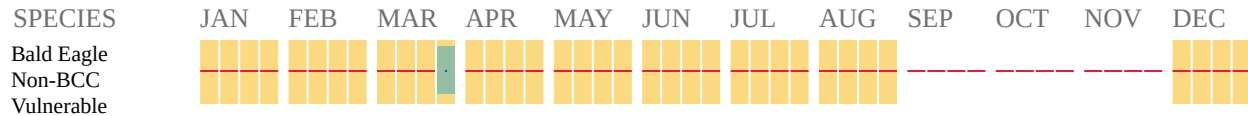
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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 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.
