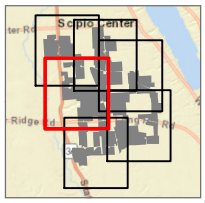
Figure 1. Open Fields and Revised Survey Locations

Agricola Wind Project

Towns of Venice, Scipio, and Moravia, Cayuga County, New York

Breeding Bird Survey Comment Response

- Previously Surveyed BBS Point Count Location (2022)
- Point Count Location
- Additional Point Count Location
- Area within 250 meters of Previously Surveyed BBS Point Count Location (2022)
- Area within 250 meters of Point Count Location
- Area within 250 meters of Additional Point Count Location
- Open Field
- BBS Study Area (2023)
- BBS Study Area (2022)



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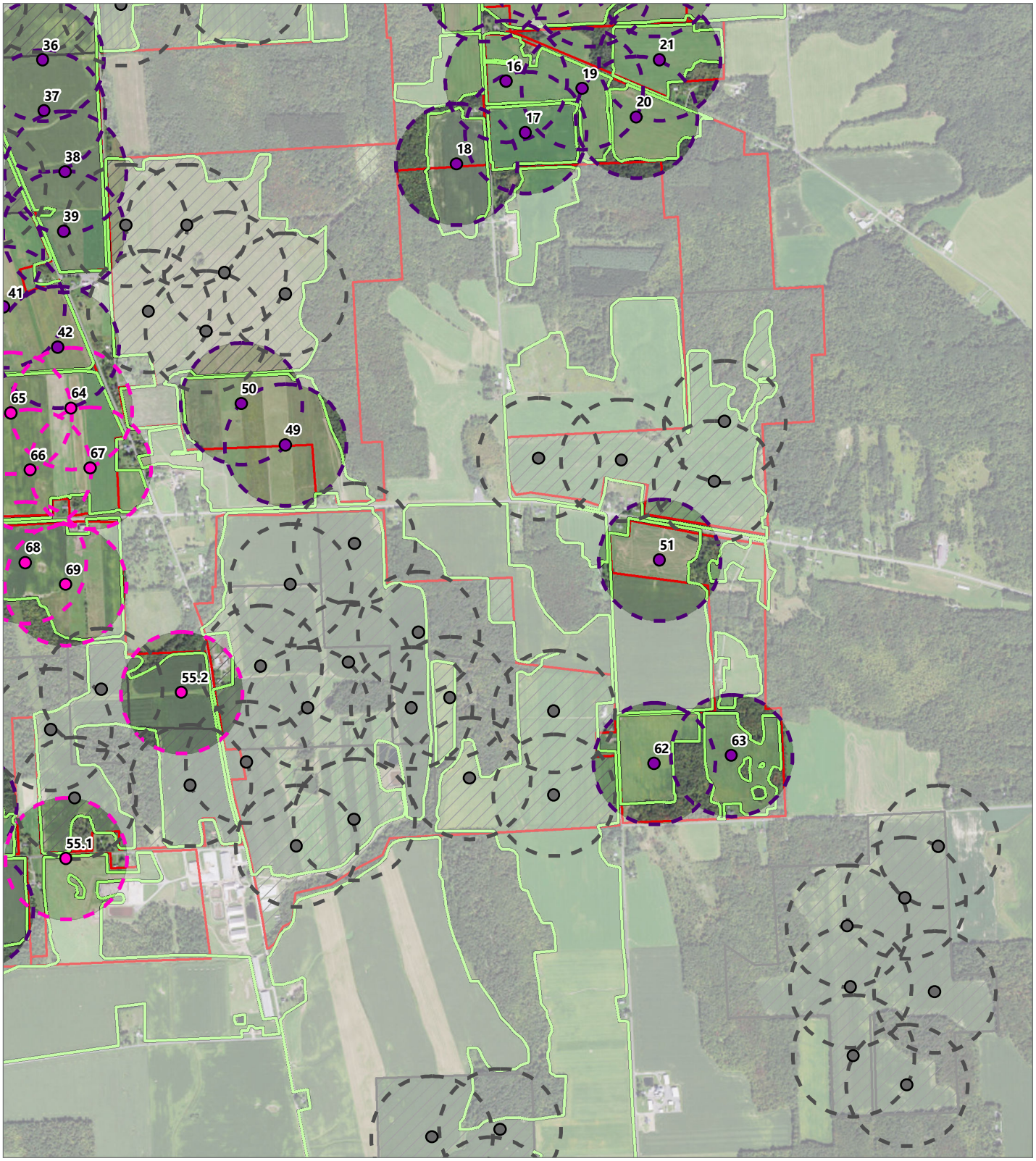
Prepared June 20, 2023
Basemap: NYSDOP "2019" orthoimagery map service

EDR

Figure 1. Open Fields and Revised Survey Locations



Agricola Wind Project

Towns of Venice, Scipio, and Moravia, Cayuga County, New York

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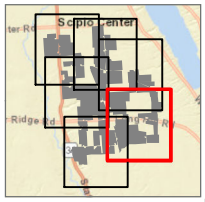

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Prepared June 20, 2023
Basemap: NYSDOP "2019" orthoimagery map service

EDR

Figure 1. Open Fields and Revised Survey Locations

Agricola Wind Project

Towns of Venice, Scipio, and Moravia, Cayuga County, New York

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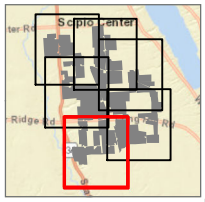

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Prepared June 20, 2023
Basemap: NYSDOP "2019" orthoimagery map service

EDR

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project Code: 2023-0111545
Project Name: Agricola Wind

August 01, 2023

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

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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

Attachment(s):

- Official Species List

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:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

PROJECT SUMMARY

Project Code: 2023-0111545
Project Name: Agricola Wind
Project Type: Power Gen - Wind
Project Description: 72-megawatt wind energy generating facility and associated necessary infrastructure in the Towns of Venice and Scipio in Cayuga County, New York

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.75090535,-76.5247479869145,14z

Counties: Cayuga County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 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 Fisheries[1], 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.

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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
[redacted]	[redacted]

INSECTS

NAME	STATUS
[redacted]	[redacted]

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: EDRDPC
Name: Lewis Lolya
Address: 41 State Street
Address Line 2: Suite 806
City: Albany
State: NY
Zip: 12207
Email llolya@edrdpc.com
Phone: 5184519150

EDR

Memorandum

To: Office of Renewable Energy Siting (ORES)
New York State Department of Environmental Conservation (NYSDEC)

From: Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR)

Date: August 30, 2023

Reference: Agricola Wind Project
Breeding Bird Surveys
State-Listed Threatened and Endangered (T&E) Species Summary

EDR Project No.: 21029

Facility Overview

- Liberty Renewables Inc. (the Applicant) is proposing to construct the Agricola Wind Project, a wind energy generation facility and associated infrastructure of up to 100 megawatts (MW) within the Towns of Venice and Scipio in Cayuga County, New York (the Facility).

- The parcels under consideration for the Facility (the Facility Site) currently total approximately 4,400 acres and consist primarily of agricultural land that is actively managed to produce row crops (primarily soybeans and corn), hayfields, and pastureland. In addition, areas of deciduous, mixed, and evergreen forest, woody wetlands, emergent herbaceous wetlands, successional shrubland, and developed land (primarily rural single-family houses, farms, and associated yards) are present.

- The Breeding Bird Survey (BBS) Study Area that was surveyed in 2023 totals approximately 4,700 acres and corresponds closely with the current Facility Site. Several land parcels have been removed from the Facility Site since the start of breeding bird surveys conducted in 2023.

Breeding Bird Survey Summary

- The 2023 surveys were designed and conducted following the 2022 NYSDEC *Survey Protocol for State-listed Breeding Grassland Bird Species*. The scope of these surveys was defined in a Breeding Bird Survey Work Plan that was submitted to the Office of Renewable Energy Siting (ORES) on April 7, 2023. ORES and NYSDEC reviewed the Breeding Bird Survey Work Plan and provided comments on May 2, 2023. Revisions were made to the study design based on agency feedback.

- The purpose of the breeding bird survey was to identify and document avian species, (including state-listed species) that utilize habitats within the lands being evaluated to host the Facility during the breeding season.

- Surveys began on May 2, 2023 for open fields within approximately 0.5 mile of **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** observations that were previously documented during spring raptor migration surveys and breeding bird surveys that were conducted by EDR in 2021 and 2022, respectively. Surveys for the remaining locations began the week of May 15, 2023.

- EDR biologists conducted morning surveys approximately weekly throughout the season, and point count locations were visited up to 11 times each. The final survey was completed on July 21, 2023.

- No state-listed endangered species were documented during surveys. **BEGIN CONFIENTIAL INFORMATION<** [redacted]

- [redacted]

- [redacted]

- [redacted] **>END CONFIDENTIAL INFORMATION**

- The observations noted herein are not intended, in and of themselves, to be a basis for conclusions regarding potential occupied habitat, as the mere observation of a species is not sufficient, based on the NYSDEC's guidance, to identify occupied habitat. Rather, the species must exhibit one or more essential behaviors.[1] Additional details and evaluation of behaviors and potential habitat will be presented in a full Breeding Bird Survey Report.

[1] 6 NYCRR Part 182.2(f) defines essential behavior as any of the behaviors exhibited by a species listed as endangered or threatened (in New York State) that are a part of its normal or traditional life cycle and that are essential to its survival and perpetuation. Essential behavior includes behaviors associated with breeding, hibernation, reproduction, feeding, sheltering, migration and overwintering.

Next Steps

- Provide the Breeding Bird Survey Report and associated geographic information system (GIS) shapefiles to ORES and NYSDEC in the coming weeks.

- Conduct winter raptor surveys for the Facility during the 2023-2024 season.

- Hold a meeting to discuss the results of the avian field surveys completed for the Facility, estimated state-listed threatened and endangered (T&E) species occupied habitat that may be present, potential impacts to estimated occupied habitat, and the requirements for a Net Conservation Benefit Plan.

- Obtain a determination regarding the presence of state-listed T&E species occupied habitat and the potential for Facility-related impacts.

Attachments: Figure 1. State-Listed Threatened Species Observations

Copies To: Meg Lee (Liberty Renewables Inc.)
Scott Biggar (Liberty Renewables Inc.)
Jessica Klami (Young/Sommer LLC)
James Muscato (Young/Sommer LLC)

This attachment has been redacted from this publicly available document because it contains protected/ confidential information regarding species listed as endangered, threatened, or special concern in New York.

NEW YORK STATE OF OPPORTUNITY. Office of Renewable Energy Siting

KATHY HOCHUL
GOVERNOR

HOUTAN MOAVENI
EXECUTIVE DIRECTOR

Comments on Wintering Grassland Raptor Survey Study Plan
Agricola Wind Facility
November 8, 2023

Pursuant to 19 NYCRR § 900-1.3(g), Liberty Renewables Inc. (Liberty Renewables or Applicant) has provided the *Winter Raptor Survey Work Plan, Agricola Wind Project, Towns of Venice and Scipio, Cayuga County, New York* dated October 2023. The Office of Renewable Energy Siting (ORES or the Office) has reviewed this study plan. In compliance with 19 NYCRR § 900-1.3(g)(4) (Chapter XVIII, Title 19 New York Codes, Rules and Regulations (NYCRR) Part 900), the Office is providing the following comments:

Field Survey Protocols for State-listed Winter Raptor Species

For major renewable energy facilities subject to Executive Law § 94-c where wintering grassland raptor surveys are recommended based upon the pre-application consultation process in 19 NYCRR §900-1.3, the Applicant is responsible for developing a pre-construction study work plan (19 NYCRR § 900-1.3(g)(4)). The Applicant's work plan should follow existing protocols[1], to the maximum extent practicable. The Office is authorized to accept a field survey work plan that can be completed in the appropriate seasonal window within one year, in compliance with 19 NYCRR § 900-1.3(g)(2)(iv). The Office is available to discuss customization of these protocols to address site-specific, project-specific factors, including but not limited to the size of the project area, the amount of open habitat within the project area, and the visibility of that habitat from proposed survey points.

The attached Data Table (Attachment A) shall be completed for all observations occurring in April and submitted with the final report.[2] Upon conclusion of survey work, Office Staff will review survey effort, survey results and other factors in consultation with NYSDEC to make a site-specific, project-specific determination of presence and site use by New York State-listed threatened and endangered species during the wintering grassland raptor season.

All communications to and from the Office concerning this survey are subject to Public Officers Law Article 6 (Freedom of Information Law). Accordingly, if the Applicant seeks trade secret or other protection of any report or accompanying information from disclosure, the submission must be accompanied by: (a) an appropriate request in compliance with FOIL and § 19 NYCRR 900-1.4(a)(5); and (b) a proposed redacted version of the report or other information in searchable PDF format.

[1] New York State Department of Environmental Conservation Survey Protocol for State-listed Wintering Grassland Raptor Species (as updated August 2021).

[2] As an option, reportable data may be entered into the New York State Breeding Bird Atlas (NY BBA) portal while surveyors are in the field, using the eBird mobile app, and/or bulk uploaded to eBird by the party responsible for submitting the final report.

Proposed Wintering Grassland Raptor Survey Study Work Plan

Based on our desktop review of the submitted study work plan, the Office provides the following comments.

It is recommended that survey points be moved or added to improve visual and auditory coverage of all open habitats having an area of 25 acres or greater within the entire facility site, including in the following approximate locations:

- A survey point should be added at location A to improve visual coverage of extensive fields to the north, east, and west.
- As a result of adding the survey point at location A, survey point 5 can be shifted south across Sherwood Rd to location B.
- A survey point should be added at location C, east of State Route 34 to provide visual coverage of open areas to the north, east, and south.
- Survey Point 10 should be shifted across State Route 34 to location D at the northwest corner of the field to improve coverage to areas south, west, and east and to reduce the distance to survey points 11 and 14.
- A survey point should be added at location E just east of State Route 34 to provide visual coverage of fields to the north, east and south
- Survey Point 21 should be shifted south across Ford Rd. to location F to provide better visual coverage of fields east, west, and south
- A survey point should be added at location G in the NW corner of the field to provide coverage of open areas.
- A survey point should be added at location H to provide visual coverage of field north of School House Rd.
- A Survey point should be added at location I south of Welch Rd. to improve visual coverage of fields.
- Survey Point 7 should be shifted east to location J to improve coverage of field portions around wooded areas.

To clarify the above, the Office provides the attached map depicting the approximate locations of the recommended survey points (Attachment B).

Please note that the comments above are based solely on desktop analysis of aerial imagery and open field size; therefore, the actual location of survey points may need to be adjusted based on field verification of visibility or the existence of more suitable habitat. After initial field visits and the location of stationary points are confirmed, the Applicant should provide updated shapefiles of the final ground-truthed viewshed assessment for each point.

Any area of suitable open habitat that the Office determines has *not* been adequately surveyed, either in frequency, spatial coverage, or duration, may (1) become occupied habitat if essential behaviors are observed in habitat within ½ miles of said area, OR (2) become or remain occupied habitat if the Office determines that the Applicant's stationary survey points or protocols were not sufficient to reliably and

accurately detect wintering raptor presence and behaviors within the facility boundary, OR (3) remain occupied habitat if preexisting data exist irrespective of survey results or the age of the data.

ATTACHMENT A - DATA TABLE

ATTACHMENT B - RECOMMENDED SURVEY POINTS

This appendix has been redacted from this publicly available document because it contains protected/confidential information regarding species listed as endangered, threatened, or special concern in New York.

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EDR

Memorandum

To:	Office of Renewable Energy Siting (ORES)
From:	Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR)
Date:	May 2024
Reference:	Agricola Wind Project Winter Raptor Survey (WRS) Work Plan Comment Responses
EDR Project No.:	21029

Background

- Agricola Wind LLC (the Applicant) is planning to construct the Agricola Wind Project, a proposed wind energy generation facility and associated infrastructure of up to 99 megawatts (MW) within the Towns of Venice and Scipio in Cayuga County, New York (the Facility).

- On behalf of the Applicant, EDR submitted a Winter Raptor Survey (WRS) Work Plan for the Facility to the Office of Renewable Energy Siting (ORES) on October 13, 2023. ORES and NYSDEC staff responded with comments on this submittal on November 8, 2023.

- The WRS study design was revised based on this feedback, and responses to ORES comments are summarized in the following sections. Updated survey locations and estimated areas of ground visibility for evening survey stations are presented in the attached **Figures 1** and **2**.

Comment Responses

- ORES Comment: A survey point should be added at location A to improve visual coverage of extensive fields to the north, east, and west.

  Response: EDR shifted Evening Survey Station 5 north to a new location (slightly southwest of ORES recommended survey point A) to improve coverage. EDR conducted additional field review in November 2023 following corn harvest to verify the optimal placement for this survey location.

- ORES Comment: As a result of adding the survey point at location A, survey point 5 can be shifted south across Sherwood Rd to location B.

Response: Evening Survey Stations 5 and 11 provide considerable coverage of the open field containing ORES recommended survey point B. In addition, no aboveground Facility components are currently planned in the parcel containing ORES recommended survey point B. Therefore, this survey location was not added to the study.

- ORES Comment: A survey point should be added at location C, east of State Route 34 to provide visual coverage of open areas to the north, east, and south.

  Response: Evening Survey Station 5 provides considerable coverage of the open field containing ORES recommended survey point C. In addition, no aboveground Facility components are currently planned in the parcel containing ORES recommended survey point C. Therefore, this survey location was not added to the study.

- ORES Comment: Survey Point 10 should be shifted across State Route 34 to location D at the northwest corner of the field to improve coverage to areas south, west, and east and to reduce the distance to survey points 11 and 14.

  Response: EDR shifted Evening Survey Station 10 southeast to improve coverage and reduce the distances to Evening Survey Stations 11 and 14.

- ORES Comment: A survey point should be added at location E just east of State Route 34 to provide visual coverage of fields to the north, east and south.

  Response: Evening Survey Station 24 was added near ORES recommended survey point E to improve coverage of open fields.

- ORES Comment: Survey Point 21 should be shifted south across Ford Rd to location F to provide better visual coverage of fields east, west, and south.

  Response: EDR conducted additional field review in November 2023, and based on this review, Evening Survey Station 23 was shifted northeast to improve coverage. Therefore, changes to Evening Survey Station 21 (ORES proposed survey point F) were not needed.

- ORES Comment: A survey point should be added at location G in the NW corner of the field to provide coverage of open areas.

  Response: No Facility components are currently proposed in the parcel containing ORES recommended survey location G; therefore, this survey location was not added to the study.

- ORES Comment: A survey point should be added at location H to provide visual coverage of field north of School House Rd.

  Response: Evening Survey Station 25 was added near ORES recommended survey point H to provide coverage of additional open fields.

- ORES Comment: A Survey point should be added at location I south of Welch Rd to improve visual coverage of fields.

  Response: Evening Survey Station 26 was added near ORES recommended survey point I to improve coverage of open fields.

- ORES Comment: Survey Point 7 should be shifted east to location J to improve coverage of field portions around wooded areas.

  Response: EDR shifted Evening Survey Station 7 northeast to improve coverage of open fields.

- ORES Comment: As an option, reportable data may be entered into the New York State Breeding Bird Atlas (NY BBA) portal while surveyors are in the field, using the eBird mobile app, and/or bulk uploaded to eBird by the party responsible for submitting the final report.

  Response: The New York State Breeding Bird Atlas database is not confidential, and provides data to the public. It is noted that entering reportable data into the publicly available New York State Breeding Bird Atlas database via eBird is an optional data management tool and is not required. Therefore, as an alternative option, the Applicant and EDR have chosen to not enter the survey data into eBird, and will instead provide the requested data with the Winter Raptor Survey Report. All survey data collected by EDR on behalf of the Applicant are confidential. ORES is not allowed to publicly disclose confidential data or share confidential data with anyone or any third party database.

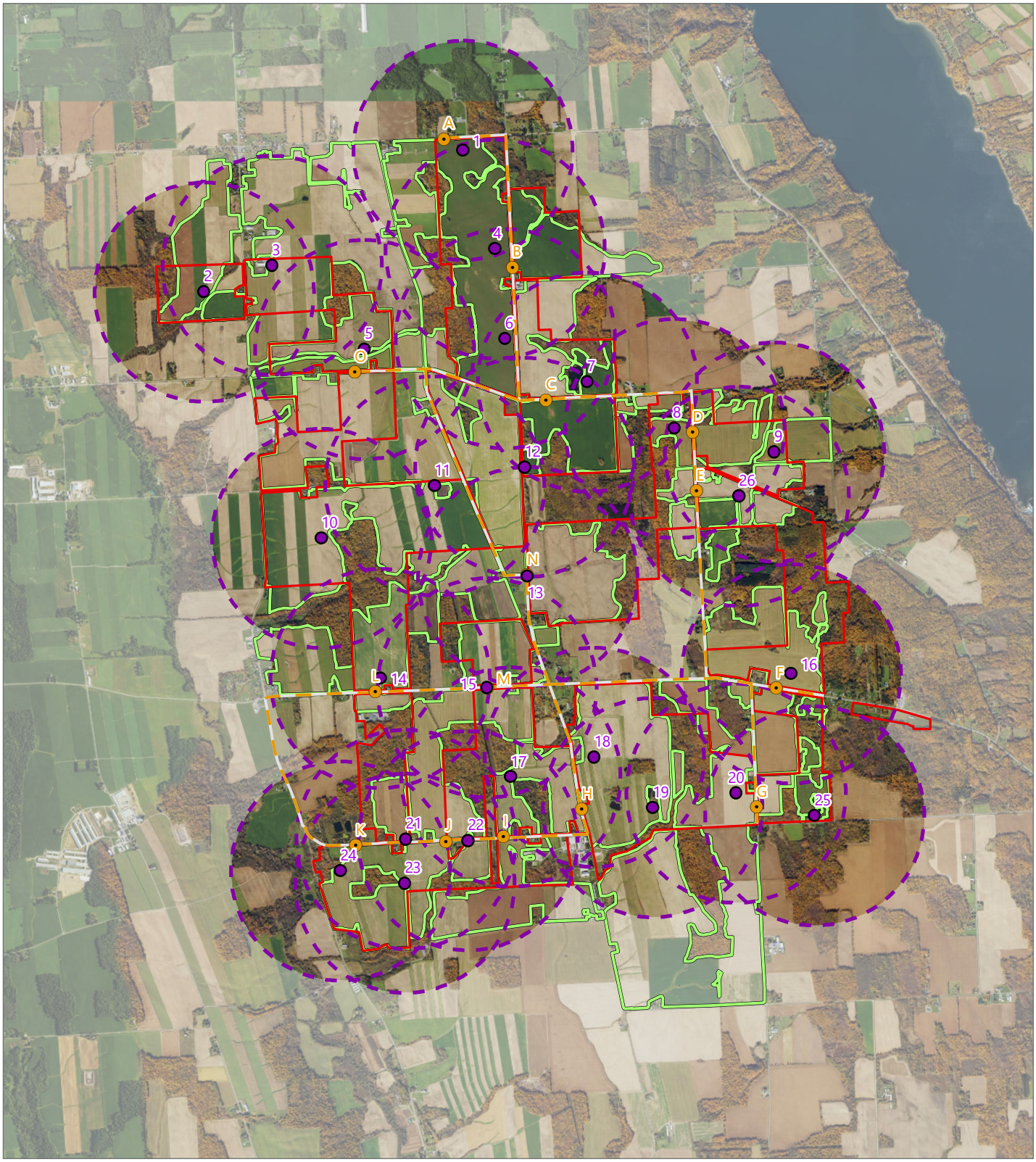
- ORES Comment: Please note that the comments above are based solely on desktop analysis of aerial imagery and open field size; therefore, the actual location of survey points may need to be adjusted based on field verification of visibility or the existence of more suitable habitat. After initial field visits and the location of stationary points are confirmed, the Applicant should provide updated shapefiles of the final ground-truthed viewshed assessment for each point.

  Response: EDR conducted additional field review to update estimated areas of ground visibility for evening survey locations to reflect conditions in November 2023. Estimated areas of ground visibility were also evaluated during field surveys, and shapefiles of the final estimated areas of ground visibility will be provided with the Winter Raptor Survey Report.

Attachments: Figures

Copies To: Meg Lee (Agricola Wind LLC)
Juliana Heffern (Agricola Wind LLC)
Kyle Crawford (Agricola Wind LLC)
Scott Biggar (Agricola Wind LLC)
Jessica Klami (Young/Sommer LLC)
James Muscato (Young/Sommer LLC)

Figure 1. Open Fields and Survey Locations



Agricola Wind Project

Towns of Venice and Scipio,
Cayuga County, New York

Winter Raptor Survey Work Plan
Comment Response Memorandum

Evening Survey Station
Daytime Driving Stop
Daytime Driving Route
Area within 1000 meters of Evening Survey Station
Open Field
WRS Study Area

0 1,000 2,000 4,000
Feet

Prepared December 11, 2023
Basemap: USDA NAIP "2022 New York 60cm" orthoimagery map service

This figure has been redacted from this publicly available document because it contains confidential information regarding the proposed facility location.

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EDR

Memorandum

To:	Office of Renewable Energy Siting (ORES)
From:	Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR)
Date:	May 7, 2024
Reference:	Agricola Wind Project Winter Raptor Surveys (WRS) State Listed Threatened and Endangered (T&E) Species Summary
EDR Project No:	21029

Facility Overview

- Agricola Wind LLC (the Applicant) is planning to construct the Agricola Wind Project, a proposed wind energy generation facility and associated infrastructure of up to 99 megawatts (MW) within the Towns of Venice and Scipio in Cayuga County, New York (the Facility).

- The lands currently under consideration for the Facility (the Facility Site) total approximately 4,000 acres, and are primarily composed of agricultural row cropland, hayfields, and pastureland. In addition, some areas of deciduous, mixed, and evergreen forestland, woody wetlands, emergent herbaceous wetlands, successional shrubland, and developed areas (mainly rural houses, farms, and associated yards) are also present.

Winter Raptor Survey Summary

- Surveys were designed and conducted following the New York State Department of Environmental Conservation (NYSDEC) August 2021 *Survey Protocol for State listed Wintering Grassland Raptor Species* (NYSDEC Survey Protocol). Surveys began on November 15, 2023, and the final survey was completed on April 11, 2024.

- **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

- The surveys were intended to document the presence and use patterns of raptor species within a defined Winter Raptor Survey (WRS) Study Area during the winter season and to identify specific habitat areas (including roost sites and foraging areas) used by state listed raptor species.

- **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

- The scope of these surveys was defined in a WRS Work Plan that was submitted to the Office of Renewable Energy Siting (ORES) on October 13, 2023.

- EDR biologists conducted multiple surveys per week for a total of 495 evening stationary surveys at 26 different locations (representing more than 765 survey-hours). Daytime driving surveys were also completed by EDR biologists at 15 different locations over a period of 20 weeks, representing a total of 20 sets of surveys from daytime survey stops.

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- State listed T&E species observations documented during the WRS are depicted by month in the attached **Figure 1**.

- The observations noted herein are not intended, in and of themselves, to be a basis for conclusions regarding potential occupied habitat, as the mere observation of a species is not sufficient, based on the NYSDEC's guidance, to identify occupied habitat. Rather, the species must exhibit one or more essential behaviors. Essential behavior is defined as any of the behaviors exhibited by a species listed as endangered or threatened (in New York State) that are a part of its normal or traditional life cycle and that are essential to its survival and perpetuation. Essential behavior includes behaviors associated with breeding, hibernation, reproduction, feeding, sheltering, migration and overwintering.

- Additional details and evaluation of behaviors and potential habitat will be presented in the WRS Report.

Next Steps

- Submit a full WRS Report and associated geographic information system (GIS) shapefiles to ORES.

- Provide an estimated occupied habitat memorandum and associated GIS shapefiles to ORES.

- Hold a meeting to discuss the results of the field surveys completed for the Facility, estimated state listed T&E species occupied habitat that may be present, potential impacts to estimated occupied habitat, and the requirements for a Net Conservation Benefit Plan (NCBP), if applicable.

- Obtain a determination regarding the presence of state listed T&E species occupied habitat and the potential for Facility-related impacts.

Attachments: Figure 1. State Listed T&E Species Observations

Copies To: Meg Lee (Agricola Wind LLC)
Juliana Heffern (Agricola Wind LLC)
Kyle Crawford (Agricola Wind LLC)
Scott Biggar (Agricola Wind LLC)
Jessica Klami (Young/Sommer LLC)
James Muscato (Young/Sommer LLC)

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EDR

Memorandum

To:	Office of Renewable Energy Siting (ORES)
From:	Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR)
Date:	July 24, 2024
Reference:	Agricola Wind Project Estimated Occupied Habitat Analysis
EDR Project No.:	21029

Introduction

- Agricola Wind LLC (the Applicant), a wholly owned subsidiary of Liberty Renewables Inc., is proposing to construct a wind energy generation facility and associated infrastructure (the Facility) of up to 99 megawatts (MW) located in the Towns of Scipio and Venice in Cayuga County, New York.

- The Facility Site is an approximately 4,000-acre area, and includes all parcels, or portions of parcels, which are currently under consideration by the Applicant for the location of Facility components.

- The Facility Site is primarily composed of agricultural fields that are actively managed to produce cultivated crops, and to a lesser extent, used for pastureland and/or hay production. In addition, some areas of deciduous, mixed, and evergreen forestland, woody wetlands, emergent herbaceous wetlands, successional shrubland, and developed areas (mainly rural houses, farms, and associated yards) are also present.

- During the pre-application consultation process, which began in 2021, the Office of Renewable Energy Siting (ORES) and the New York State Department of Environmental Consultation (NYSDEC) recommended conducting on-site breeding bird surveys and winter raptor surveys, with a focus on open fields greater than 25 acres in size. These open areas may represent suitable habitat for grassland bird species (state listed and others).

- Breeding bird surveys were conducted in 2022 and 2023, and winter raptor surveys were conducted during the 2023-2024 season.

- In addition to these studies, spring and fall raptor migration surveys were also conducted for the Facility in 2021. Eagle point count surveys are also being conducted for the Facility following federal guidance.

- This memorandum summarizes pre-construction avian surveys that have been completed for the Facility, along with EDR's estimate of occupied habitat based on the results of these surveys and data provided by ORES. An estimate of areas where Facility components may be located within estimated occupied habitat is also provided herein. This memorandum is being submitted in anticipation of a meeting with ORES to discuss whether occupied habitat exists within the Facility Site and, if applicable, requirements for a Net Conservation Benefit Plan.

- As part of evaluating estimated occupied habitat for state listed grassland bird species, EDR digitized the boundaries of open fields located within, or partially within, the Facility Site (Attachment 1, Figure 1).

- The results of the pre-construction avian surveys are summarized in the following sections.

Summary of Pre-Construction Avian Surveys

2021 Spring Raptor Migration Surveys

- Spring raptor migration surveys were conducted from March 3 to May 25, 2021. The study methods and results were detailed in a work plan, threatened and endangered (T&E) species summary memorandum, and report prepared by EDR in 2021 (EDR, 2021a; EDR, 2021b; EDR, 2021c).

- Two survey locations were established for the spring raptor migration study (Attachment 1, Figure 2). A total of 26 surveys were conducted, totaling more than 250 survey-hours.

- Surveys were conducted once per week between 8:00 a.m. and until at least 2 hours prior to sunset, which ranged from approximately 2:00 p.m. to approximately 6:00 p.m. as the season progressed.

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2021 Fall Raptor Migration Surveys

- Fall raptor migration surveys were conducted from August 17 to December 14, 2021. The study methods and results were detailed in a work plan, T&E species figure, and report prepared by EDR in 2021 and 2022 (EDR, 2021d; EDR, 2022a; EDR, 2022b).

- Two survey locations were established for this study (Attachment 1, Figure 2). A total of 36 surveys were conducted, totaling more than 290 survey-hours.

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2022 Breeding Bird Surveys

- Initial breeding bird surveys were conducted from May 5 to July 21, 2022. The study methods and results were detailed in a work plan, comment response memorandum, T&E species summary memorandum, and report prepared by EDR in 2022 (EDR, 2022c; EDR, 2022d; EDR, 2022e; EDR, 2022f).

- Point count surveys were conducted at 138 locations (Attachment 1, Figure 2). Morning surveys were conducted on 42 different days, and each point count survey location was visited up to 10 times throughout the survey period.

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2023 Breeding Bird Surveys

- Additional breeding bird surveys were conducted from May 2 to July 21, 2023. The study methods and results were detailed in a work plan, comment response memorandum, T&E species summary memorandum, and report prepared by EDR in 2023 and 2024 (EDR, 2023a; EDR, 2023b; EDR, 2023c; EDR, 2024a).

- A total of 74 point count locations were established for the 2023 study (Attachment 1, Figure 2). In total, morning point count surveys were completed on 35 different days, and each point count survey location was visited up to 10 times throughout the survey period.

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2023-2024 Winter Raptor Surveys

- Winter raptor surveys targeting **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** were conducted from November 15, 2023, to April 11, 2024. The study methods and results were detailed in a work plan, comment response memorandum, T&E species summary memorandum, and report prepared by EDR in 2023 and 2024 (EDR, 2023d; EDR, 2024b; EDR, 2024c; EDR, 2024d).

- A total of 26 evening survey stations and 15 daytime driving survey stops were established for this effort (Attachment 1, Figure 2).

- Over the course of the survey period, 495 evening stationary surveys and 20 sets of daytime driving surveys were completed.

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2023-2024 Eagle Point Count Surveys

- Eagle point count surveys are currently being conducted for the Facility following federal guidance. Eagle point count surveys began on August 23, 2023 and will continue each month for up to two years. Observations recorded through May 2024 have been included in this occupied habitat analysis.

- A total of 10 point count locations were established for the eagle point count surveys (Attachment 1, Figure 2). For this study, each point count location is being visited and surveyed at least once each month.

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Estimated Occupied Habitat

- State listed T&E species observations documented during the pre-construction avian surveys are presented in Attachment 1, Figures 3 to 7.
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- [redacted]>**END CONFIDENTIAL INFORMATION** Crop cover types for the past 5 years based on U.S. Department of Agriculture (USDA) CropScape data (USDA, 2024a; USDA, 2024b) are presented in Attachment 1, Figure 10.

- In addition, crop cover types and vegetation heights recorded by EDR surveyors during the breeding bird survey seasons are summarized in Attachment 2, Sheet 3.

- To further evaluate and document the extent of estimated state listed grassland bird species occupied habitat present within the Facility Site, EDR also prepared a Draft Applicant Occupied Habitat Field by Field Analysis Submission Table (Attachment 3).

- Of 39 open fields that overlap with the Facility Site, **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

Estimated Take

- Given the current locations of Facility components with aboveground and relatively permanent footprints (e.g., wind turbines, access roads) in relation to estimated occupied habitat areas for state listed T&E grassland bird species, 'take' is anticipated to result from Facility construction.

- To estimate potential adverse modification of occupied habitat, EDR first created potential displacement buffers around aboveground Facility components and an existing utility line.

- Specifically, the following radial buffer distances were used based on NYSDEC testimony filed for other wind projects in New York (e.g., Denoncour and Mazzocchi, 2019; Denoncour and Adams, 2019) and related guidance provided to EDR by the NYSDEC and ORES: (1) wind turbines – 250 meters; (2) meteorological and aircraft detection lighting system towers – 180 meters; (3) operations and maintenance (O&M) facility, collection substation, and point of interconnection (POI) switchyard – 100 meters; and (4) access roads – 15 meters. EDR also buffered an existing utility line by 10 meters, and these areas were considered to have already been impacted.

- To create estimated adverse modification polygons, EDR digitized areas within the displacement buffers around Facility components that included areas that were located within estimated occupied habitat, and within open fields greater than 25 acres in size (Denoncour and Mazzocchi, 2019; Denoncour and Adams, 2019). Non-open areas (e.g., forestland, wooded hedgerows, existing disturbed/developed areas) and open fields less than 25 acres in size were not included given that they are not suitable for use by the grassland bird species in question. Additionally, if the study results indicated that a road adjacent to an open field boundary was not a barrier to movement for state listed grassland raptor species, remaining areas less than 25 acres were not considered impacted based on the assumption that these species will be able to continue to move across roads between and among the remaining open field areas following Facility construction.

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Conclusions and Next Steps

- The studies conducted for the Facility to document on-site use by state listed species to date have been effective in characterizing potential impacts, and additional study work is not recommended.

- The pre-construction avian survey reports and this memorandum provide the information needed for ORES to hold a meeting with the Applicant, issue a determination of occupied habitat and incidental take, and provide guidance regarding a Net Conservation Benefit Plan to be included with the Facility's Siting Permit Application.

List of Threatened or Endangered Species Submissions

- The following documents were previously submitted to ORES to meet pre-application requirements pertaining to state listed T&E species:

    - Spring Raptor Survey Work Plan dated February 2021 (submitted February 2021).
    - Spring Raptor Survey T&E Species Summary Memorandum dated June 2021 (submitted June 16, 2021).
    - Spring Raptor Migration Survey Report dated July 2021 (submitted July 2021).
    - Preliminary Wildlife Site Characterization Report dated May 2021 (submitted July 2021).
    - Fall Raptor Migration Survey Work Plan dated August 2021 (submitted August 17, 2021).
    - Preliminary Winter Raptor Survey Work Plan dated October 2021 (submitted October 15, 2021).
    - Fall Raptor Migration Survey T&E Species Figure dated January 7, 2022 (submitted January 7, 2022).

- Fall Raptor Migration Survey Report dated January 2022 (submitted January 25, 2022).
- Breeding Bird Survey Work Plan dated April 2022 (submitted April 11, 2022).
- Breeding Bird Survey Work Plan Comment Response Memorandum dated July 2022 (submitted July 1, 2022).
- Breeding Bird Survey T&E Species Summary Memorandum dated August 2022 (submitted August 17, 2022).
- Breeding Bird Survey Report dated October 2022 (submitted October 13, 2022).
- Breeding Bird Survey Work Plan dated April 2023 (submitted April 7, 2023).
- Breeding Bird Survey Work Plan Comment Response Memorandum dated July 2023 (submitted July 5, 2023).
- Breeding Bird Survey T&E Species Summary Memorandum dated September 2023 (submitted September 5, 2023).
- Winter Raptor Survey Work Plan dated October 2023 (submitted October 13, 2023).
- Revised Wildlife Site Characterization Report dated September 2023 (submitted October 24, 2023).
- Breeding Bird Survey Report dated March 2024 (submitted March 26, 2024).
- Winter Raptor Survey Update dated April 2, 2024 (submitted April 2, 2024).
- Winter Raptor Survey Comment Response Memorandum dated May 2024 (submitted May 8, 2024).
- Winter Raptor Survey T&E Species Summary Memorandum dated May 8, 2024 (submitted May 14, 2024).
- Winter Raptor Survey Report dated July 2024 (submitted July 11, 2024).

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ORES
July 24, 2024

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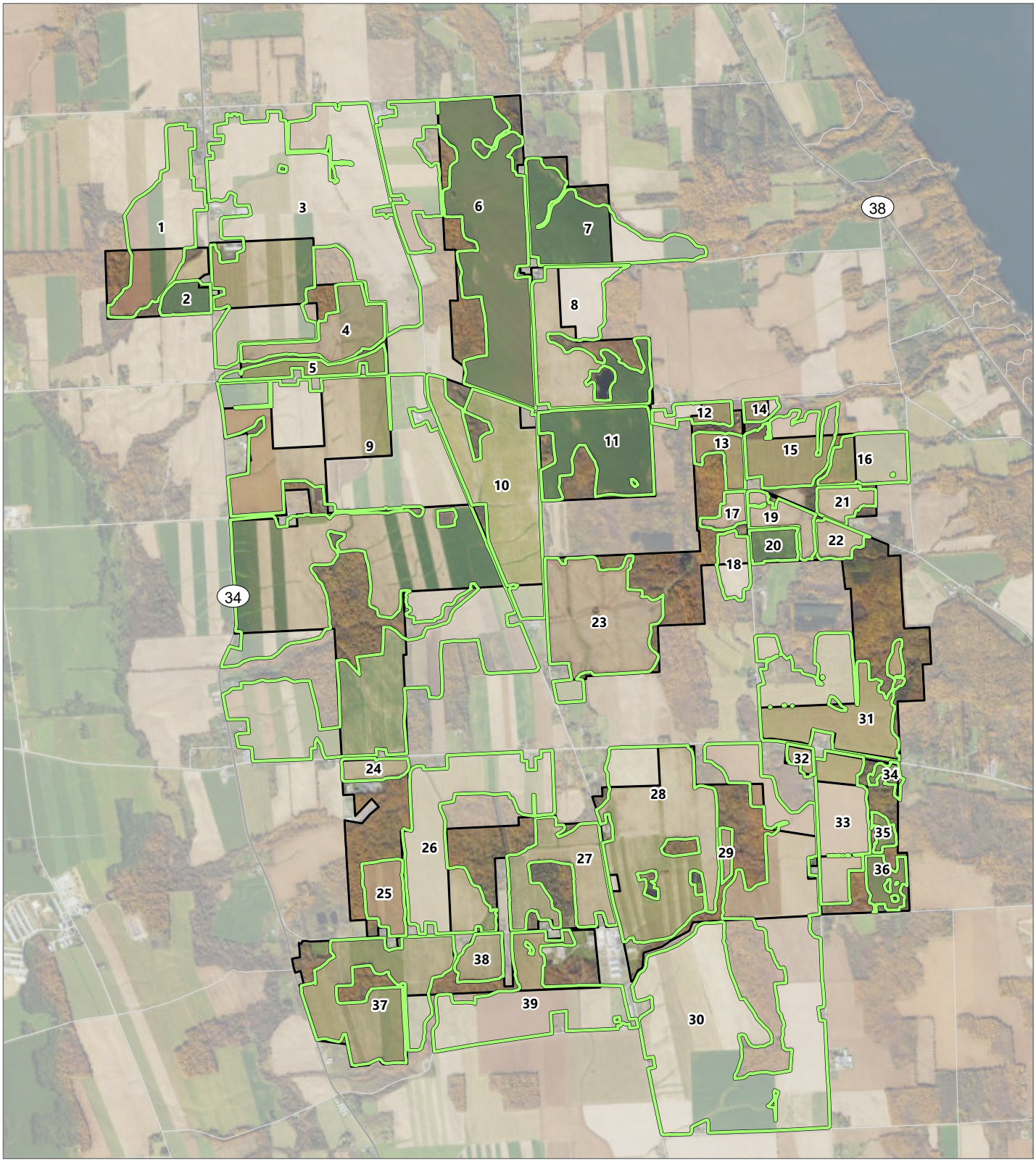
Jessica Klami (Young/Sommer LLC)
James Muscato (Young/Sommer LLC)

Attachments: Attachment 1: Figures
Attachment 2: Additional Supporting Materials
Attachment 3: Draft Applicant Occupied Habitat Field by Field Analysis Submission Table

Attachment 1

Figures

Figure 1. Open Fields



Agricola Wind Project

Towns of Venice and Scipio,
Cayuga County, New York

Estimated Occupied Habitat Analysis

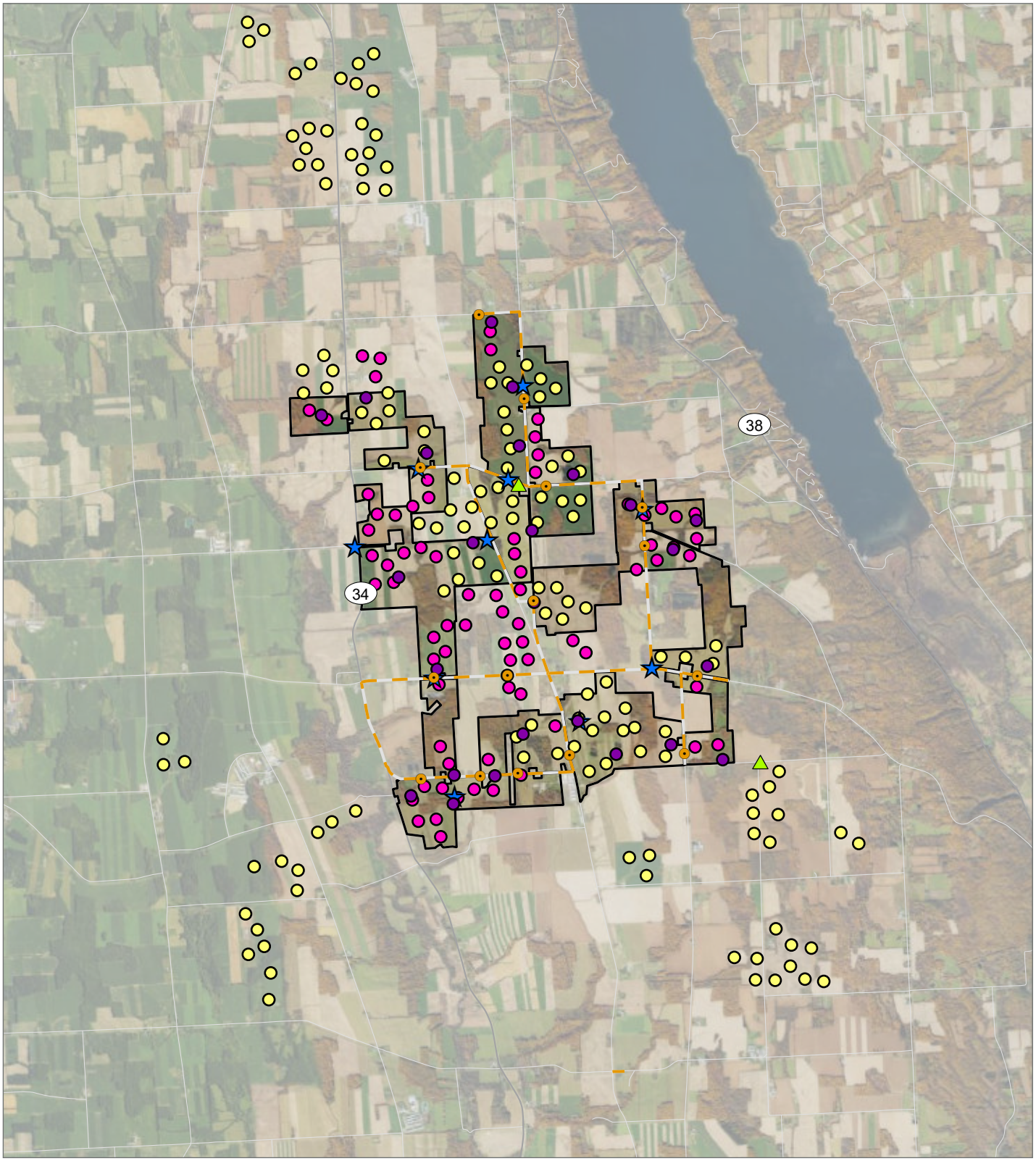
Open Field
Facility Site

0 0.25 0.5 1
Miles

Prepared June 26, 2024
Basemap: USDA NAIP "2022 New York 60cm" orthoimagery map service

EDR

Figure 2. Avian Survey Locations



Agricola Wind Project

Towns of Venice and Scipio,
Cayuga County, New York

Estimated Occupied Habitat Analysis

- 2023-2024 Winter Raptor Survey Daytime Driving Stop
- 2023-2024 Winter Raptor Survey Evening Survey Station
- 2021 Spring and Fall Raptor Migration Survey Location
- 2022 Breeding Bird Survey Point Count Location
- 2023 Breeding Bird Survey Point Count Location
- 2023-2024 Eagle Point Count Survey Point Count Location
- 2023-2024 Winter Raptor Survey Daytime Driving Stop
- Facility Site

0 0.25 0.5 1
Miles

Prepared June 27, 2024
Basemap: USDA NAIP "2022 New York 60cm" orthoimagery map service

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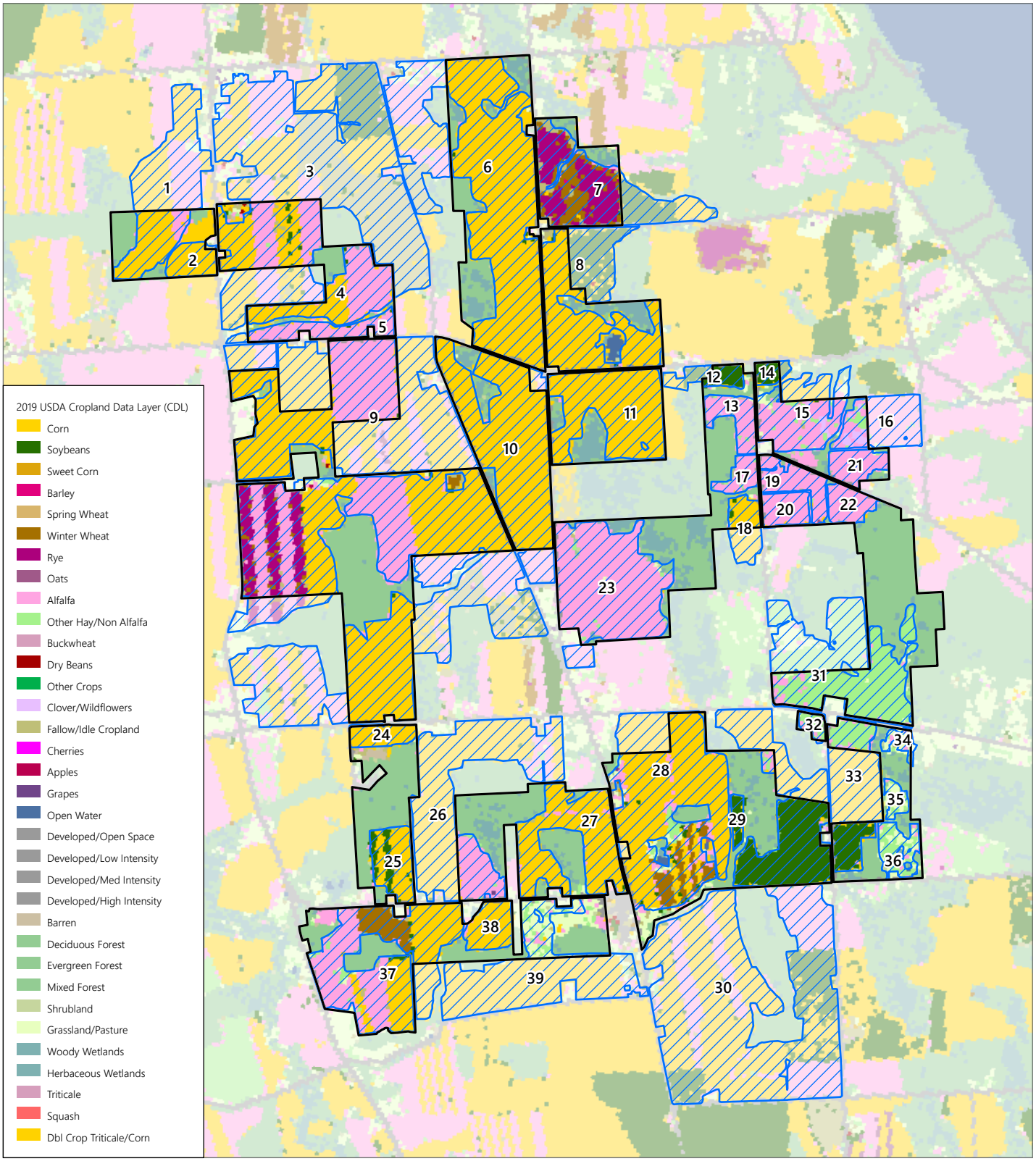
Figure 10. Crop Cover Types (2019)

Sheet 1



Agricola Wind Project

Towns of Venice and Scipio,
Cayuga County, New York

Estimated Occupied Habitat Analysis

Open Field
Facility Site

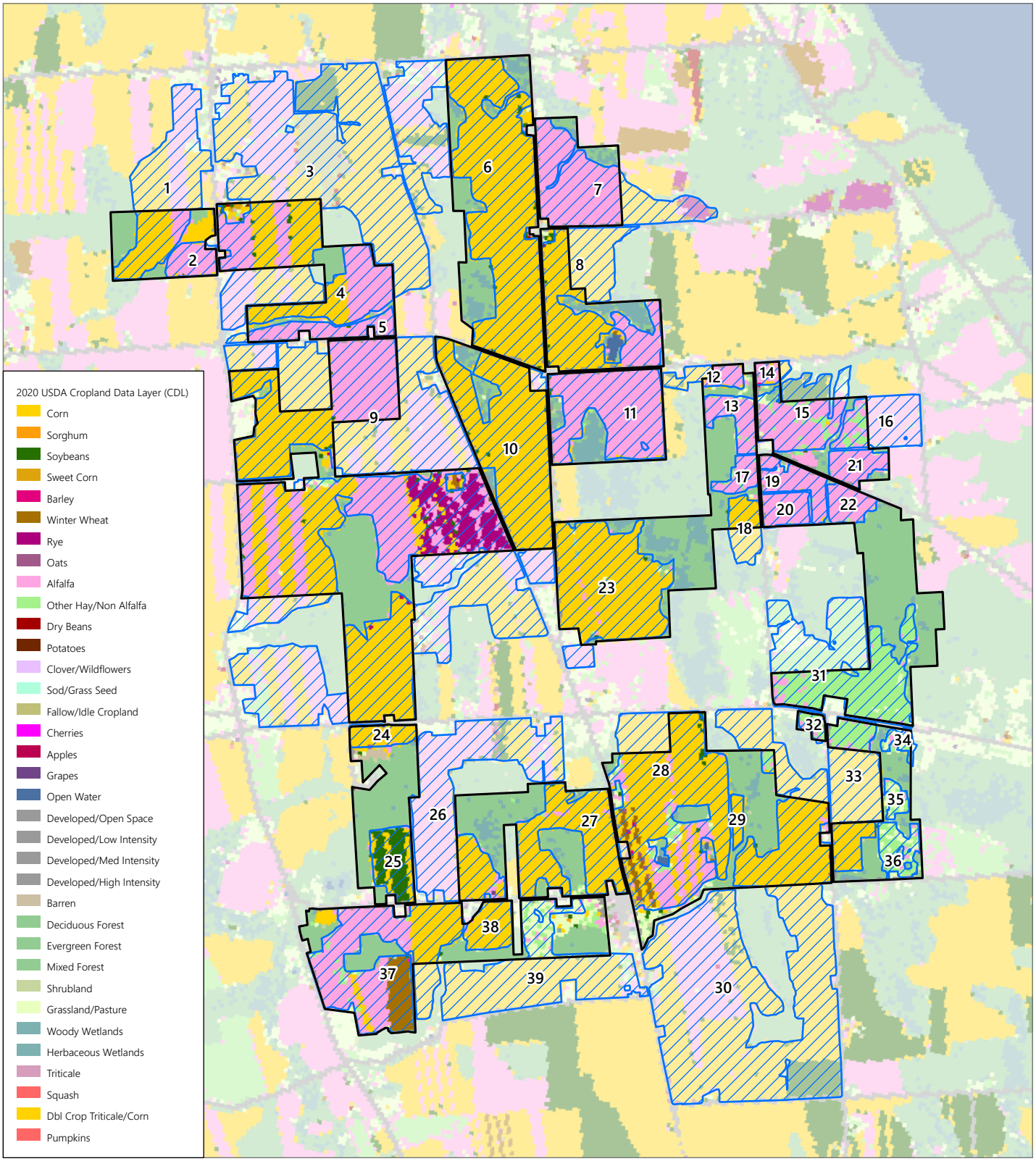
0 0.25 0.5 1
Miles

EDR

Prepared July 5, 2024
Basemap: USDA National Agricultural Statistics Service National Cropland Data Layer 2019

Figure 10. Crop Cover Types (2020)

Sheet 2



Agricola Wind Project

Towns of Venice and Scipio,
Cayuga County, New York

Estimated Occupied Habitat Analysis

Open Field
Facility Site

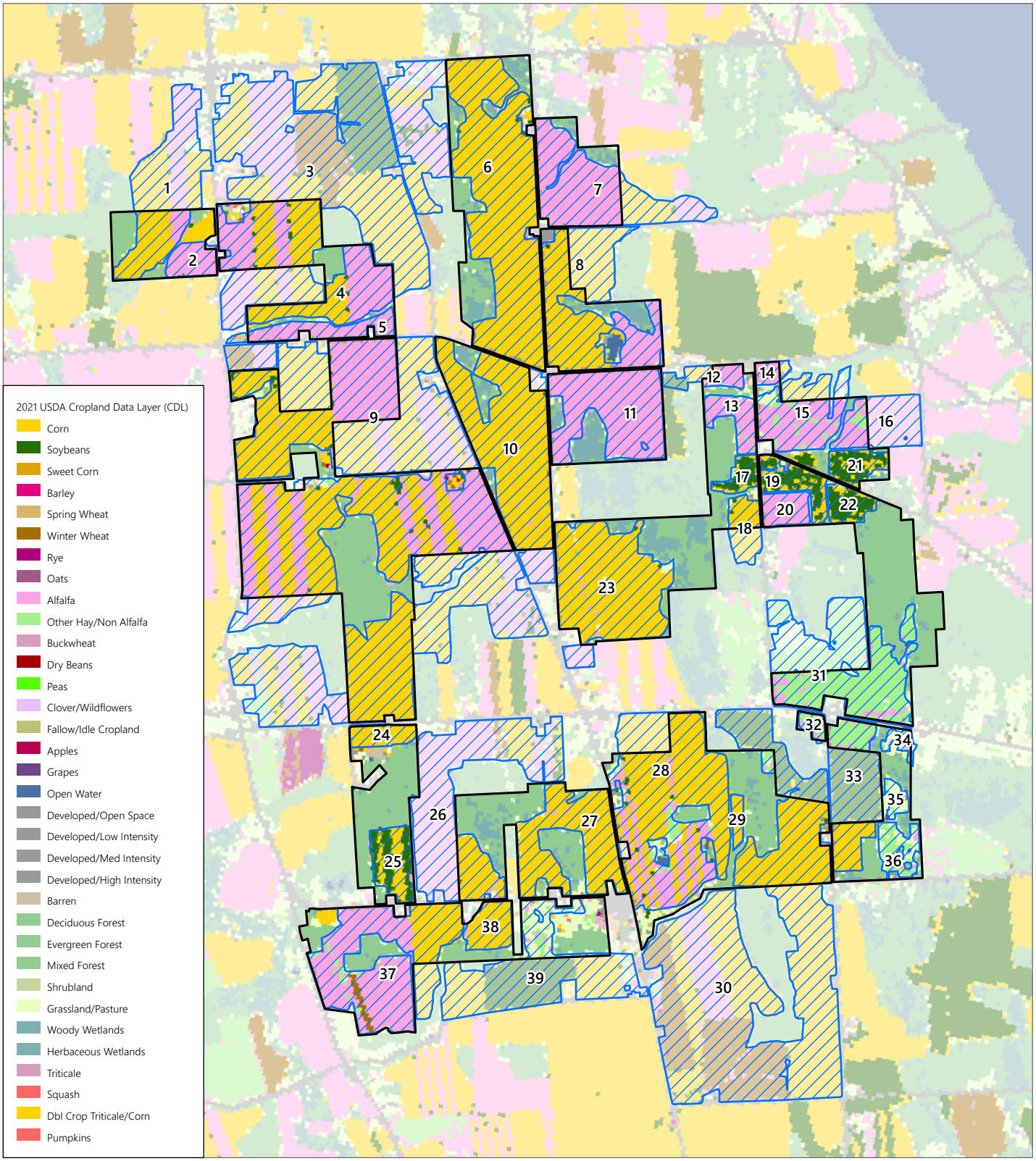
0 0.25 0.5 1
Miles

EDR

Prepared July 5, 2024
Basemap: USDA National Agricultural Statistics Service National Cropland Data Layer 2020

Figure 10. Crop Cover Types (2021)

Sheet 3



Agricola Wind Project

Towns of Venice and Scipio,
Cayuga County, New York

Estimated Occupied Habitat Analysis

Open Field
Facility Site

0 0.25 0.5 1
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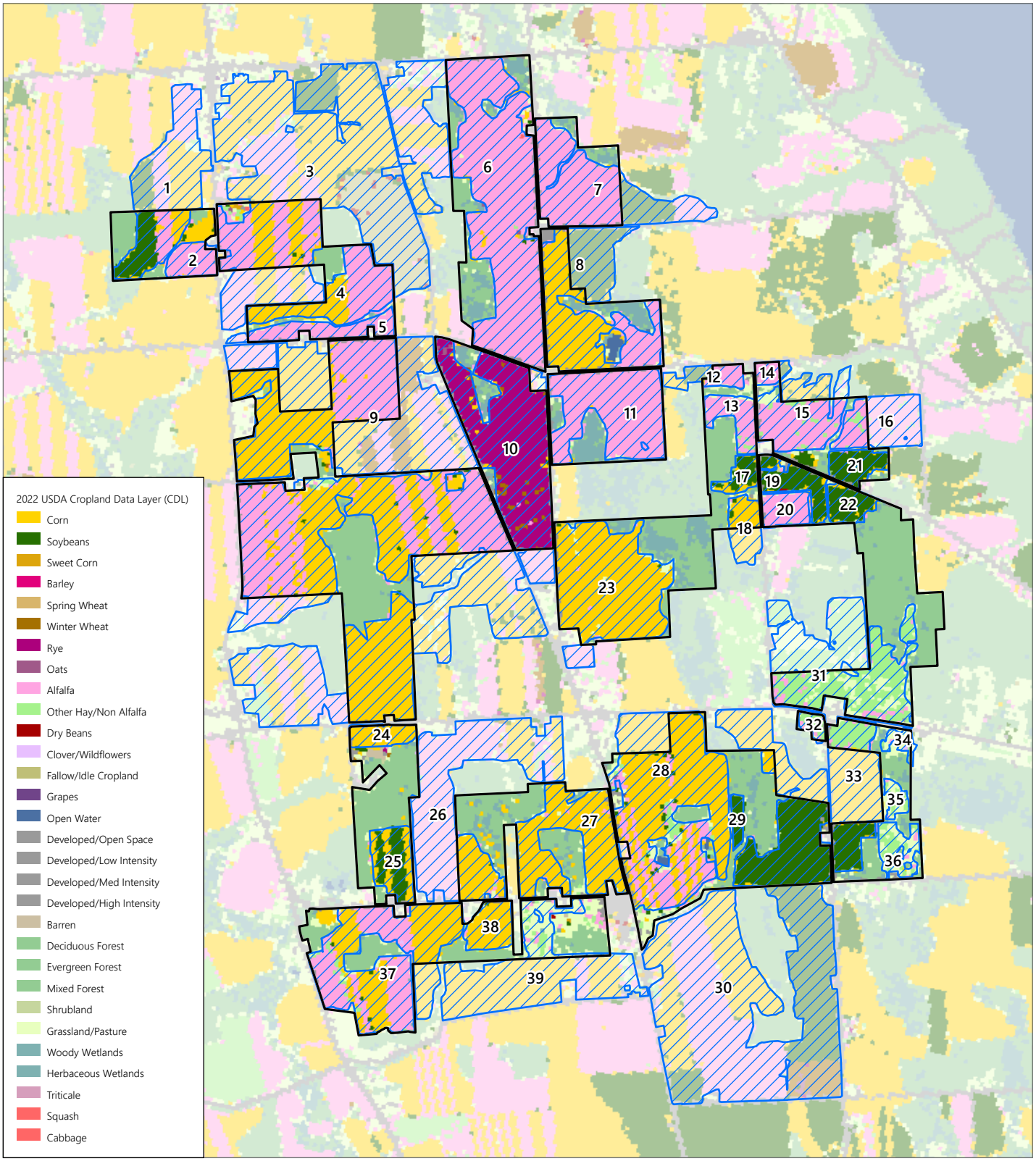
EDR

Prepared July 5, 2024
Basemap: USDA National Agricultural Statistics Service National Cropland Data Layer 2021

Figure 10. Crop Cover Types (2022)

Sheet 4



Agricola Wind Project

Towns of Venice and Scipio,
Cayuga County, New York

Estimated Occupied Habitat Analysis

Open Field

Facility Site

0 0.25 0.5 1

Miles

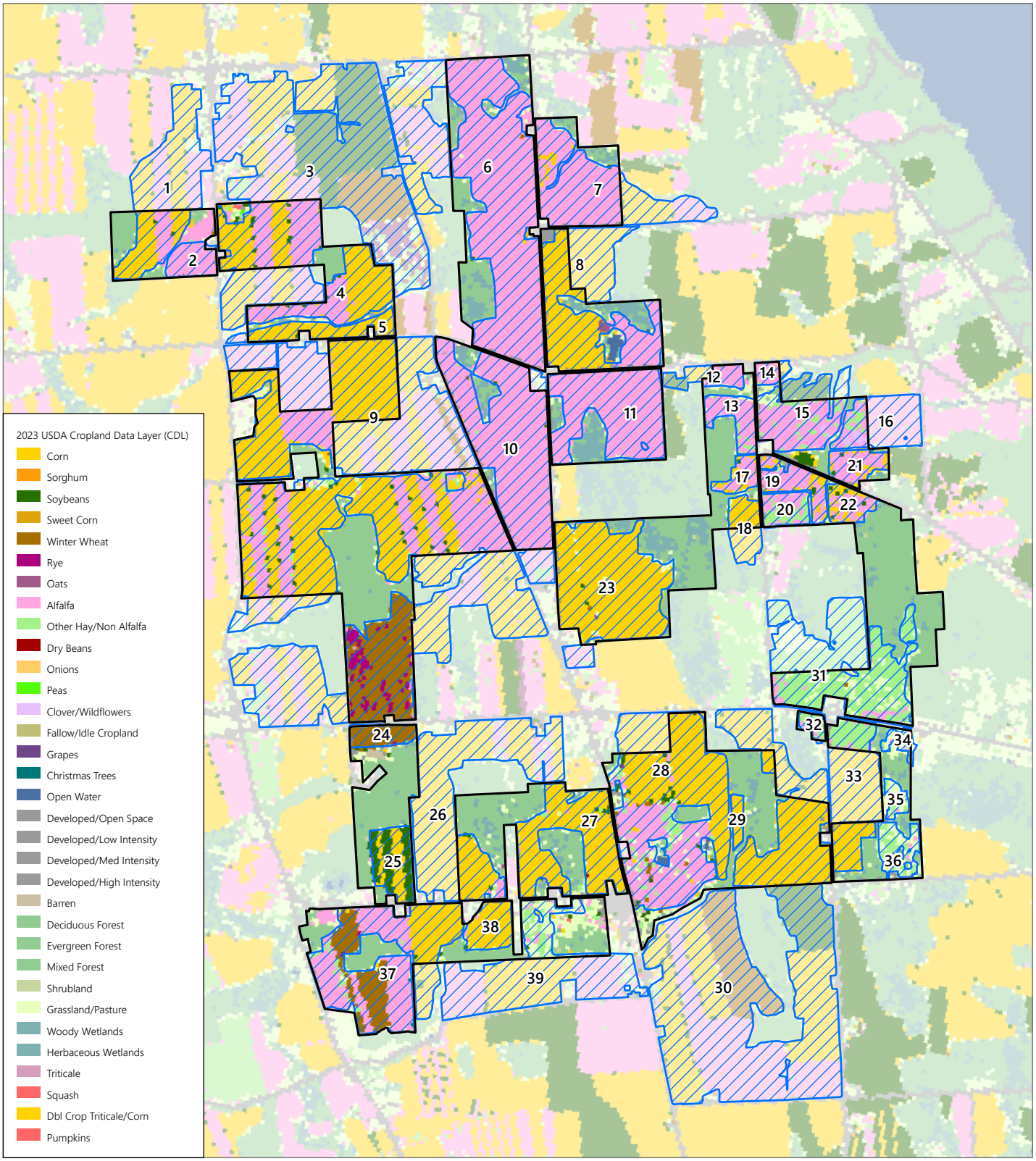
EDR

Prepared July 5, 2024

Basemap: USDA National Agricultural Statistics Service National Cropland Data Layer 2022

Figure 10. Crop Cover Types (2023)

Sheet 5



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Prepared July 5, 2024
Basemap: USDA National Agricultural Statistics Service National Cropland Data Layer 2023

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Attachment 2

Additional Supporting Materials

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Attachment 3

Draft Applicant Occupied Habitat Field by Field Analysis Submission Table

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EDR

Memorandum

To:	Office of Renewable Energy Siting and Electric Transmission (ORES)
From:	Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR)
Date:	September 6, 2024
Reference:	Agricola Wind Project (Permit Application No. 23-00064) Response to Draft Occupied Habitat Take Determination
EDR Project No:	21029

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) has prepared this memorandum on behalf of Agricola Wind LLC (the Applicant), a wholly owned subsidiary of Liberty Renewables Inc. for a proposed wind energy generation facility of up to 99 megawatts (MW) located in the Towns of Venice and Scipio in Cayuga County, New York (the Facility). The Facility Site is an approximately 4,000-acre area, and includes all parcels, or portions of parcels, which are currently under consideration by the Applicant for the location of Facility components. The Office of Renewable Energy Siting and Electric Transmission (ORES) is reviewing the Facility under Article VIII of the New York State Public Service Law (Article VIII).[1]

An Estimated Occupied Habitat Memorandum (the Occupied Habitat Memo) dated July 24, 2024, was submitted to ORES staff on July 25, 2024 (EDR, 2024). The Occupied Habitat Memo summarized pre-construction avian surveys that have been completed for the Facility, along with EDR's estimate of occupied habitat[2] based on the results of these surveys and data previously provided by ORES. Areas where Facility components overlap potentially occupied habitat were also estimated.

A meeting was held with ORES staff on August 22, 2024 to discuss whether occupied habitat for threatened or endangered wildlife species exists within the Facility Site, potential Facility-related adverse impacts to occupied habitat (i.e., 'take'), and requirements for a Net Conservation Benefit

[1] Chapter XI, Title 16 of the New York Codes, Rules and Regulations (NYCRR) Part 1100. Available at: https://ores.ny.gov/regulations.

[2] Occupied habitat is defined as a geographic area in New York within which a species listed as endangered or threatened in New York has been determined by the New York State Department of Environmental Conservation (NYSDEC) to exhibit one or more essential behaviors. (6 NYCRR 182.2(p)). Essential behavior refers to any of the behaviors exhibited by a species listed as endangered or threatened in New York that are a part of its normal or traditional life cycle and that are essential to its survival and perpetuation. (6 NYCRR 182.2(f)). Essential behavior includes behaviors associated with breeding, hibernation, reproduction, feeding, sheltering, migration and overwintering (NYSDEC, 2021). Note that the Article VIII regulations do not include definitions for occupied habitat, occupied wintering habitat, occupied breeding habitat, or essential behavior.

Plan to mitigate for areas identified as take. Prior to this meeting, a preliminary draft occupied habitat take determination was provided by ORES on August 19, 2024, estimating that the Facility would result in the take of **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION**

Upon review of the ORES draft occupied habitat take estimate, EDR noted several areas where the evidence did not support ORES's conclusions regarding take and that a modification of the take estimate may be warranted based on completed study results, further consideration of the **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** life history, and existing conditions within the Facility Site. These areas were discussed during the meeting held on August 22, 2024, and ORES staff requested that the Applicant and EDR provide supplemental information detailing the recommended modifications. Therefore, this memorandum summarizes the areas that EDR believes require further refinement and evaluation, and describes recommended modifications to the occupied habitat take determination for ORES staff to consider. The recommended modifications should be made for the following reasons:

- Consistent with hawk watch sites in the same region as the Facility, on-site spring raptor migration data suggested that **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** observed in May within or near the Facility Site were spring migrants.
- Significant levels of survey effort during the breeding season after the spring migration period did not yield results of an increased presence of **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** within the current Facility Site, or an indication that the species was breeding on-site (i.e., no further probable or confirmed breeding behaviors).
- During two breeding bird survey seasons (2022 and 2023), approximately 83% of the **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** observations recorded within the current Facility Site occurred in May. Probable breeding behavior was documented for only two individuals (i.e., a suspected pair in suitable habitat) in one area on the same date, and no confirmed breeding behaviors were recorded for this species.
- When observed during the breeding bird studies, **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** were seen for an average of approximately 2.2 minutes per bird, and for a total of approximately 40

minutes. This represents approximately 0.13% of the total breeding bird survey effort across the 2022 and 2022 seasons (total of approximately 30,548 survey-minutes).

- Precedent from several recent renewable energy facilities demonstrates that occupied breeding habitat has been defined for grassland bird species based on evidence of probable and/or confirmed breeding, rather than evidence of possible breeding or observations of solely foraging behavior.

In addition, since the Occupied Habitat Memo was submitted on July 25, 2024, the Facility layout has been updated to address design constraints and further minimize impacts to a variety of natural resources. Specifically, these changes include: (1) shifts to access roads leading to wind turbines T-3, T-5, T-6, T-14, and T-19 (as well as to the collection substation, point of interconnection [POI] substation, and operations and maintenance [O&M] facility); (2) shifts to wind turbines T-3 and T-6; (3) shifts to the aircraft detection lighting system (ADLS) tower and one of the permanent meteorological (MET) towers; and (4) establishment of an updated collection substation location adjacent to the POI substation. These Facility layout refinements are expected to result in minimal changes to the ORES occupied habitat take estimate; however, the Applicant and EDR request ORES to review and update the take estimate for the updated Facility layout. Current Facility layout shapefiles are being provided to ORES with this memorandum.

Recommended Modifications to the Draft Occupied Habitat Take Determination

The main difference between the EDR and ORES occupied habitat estimates relates to the criteria used to determine whether occupied breeding habitat for a threatened or endangered grassland bird species exists within a given area. Species-specific criteria for identifying occupied habitat, and definitions for the terms 'occupied breeding habitat' and 'essential breeding behavior,' are not provided in New York State regulations. Therefore, the New York State Department of Environmental Conservation (NYSDEC), ORES, and project proponents, must interpret species use and behaviors based on the following definitions provided within New York's endangered and threatened species regulations at Title 6 New York Codes, Rules and Regulations (6 NYCRR) Part 182.2:

> *Essential behavior means any of the behaviors exhibited by a species listed as endangered or threatened in this Part that are a part of its normal or traditional life cycle and that are essential to its survival and perpetuation. Essential behavior includes behaviors associated with breeding, hibernation, reproduction, feeding, sheltering, migration and overwintering.*

> *Occupied habitat means a geographic area in New York within which a species listed as endangered or threatened in this Part has been determined by the department to exhibit one or more essential behaviors. Once identified as occupied habitat, the department will continue to consider that area as occupied habitat until the area is no longer suitable habitat for that species or monitoring has indicated that reoccupation by that species is unlikely.*

Because these definitions are not species- or season-specific, they must be interpreted for each species listed as threatened or endangered in New York State, and for the key seasons (e.g., breeding, wintering) in which a given species may occur within New York State. In preparing an estimate of the extent of occupied breeding habitat for the **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION** within each open field overlapping the Facility Site, EDR considered the following factors:

1. **Presence** – Was the species documented at all within a given open field?
2. **Breeding Season** – Did the observations of the species occur during the NYSDEC-defined breeding season for grassland birds (April 23 to August 15; NYSDEC, 2024)?
3. **Migration Season** – Did the observations occur only during the NYSDEC-defined spring migration period, which runs from March 1 to May 31 (NYSDEC, 2016), or did they also occur during the breeding season after the spring migration period (after May 31 and before August 15)?
4. **Consistent Use** – Were multiple observations of the species recorded within the same open field during the same breeding season, or was there only a single observation during a given breeding season?
5. **Behaviors** – Did the species exhibit behaviors that could be considered essential behaviors indicative of breeding (i.e., 'essential breeding behaviors')? Essential breeding behaviors included probable and/or confirmed breeding behaviors following the Cornell Lab of Ornithology's definitions for the New York Breeding Bird Atlas (eBird, 2024). Although many bird behaviors can be considered 'essential' based on New York's regulatory definition, evidence of certain essential behaviors during the time of year in which breeding may take place for grassland bird species, is *not* evidence of breeding behavior necessarily, and EDR would not consider such areas where those observations occur to be breeding habitat on the basis of the essential behavior observation alone. It is important to further define 'essential breeding behaviors' as those behaviors indicating that a species is a probable or confirmed breeder in a given area. Such behaviors are tied to reproduction, nesting, and raising young. Foraging behavior, while important to any bird, is something that is typically exhibited during all seasons throughout a bird's annual life cycle. **BEGIN CONFIDENTIAL INFORMATION**<[redacted]>**END CONFIDENTIAL INFORMATION**

regularly exhibit foraging and hunting behaviors during migration, which is supported by scientific literature (e.g., Littlefield and Johnson, 2005; McIntyre and Ambrose, 1999; Smith et al., 2020) and the recent raptor migration studies that EDR conducted for the Facility (EDR, 2021; EDR, 2022).

Based on these considerations, the results of on-site field surveys, and discussions with ORES during the meeting held on August 22, 2024, EDR requests additional ORES review and analysis for the following open fields, as originally identified in EDR's Occupied Habitat Memo (EDR, 2024) and in the ORES draft occupied habitat take determination provided on August 19, 2024.

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Additional Considerations and Comparison to Previous Take Determinations

For threatened and endangered species, the NYSDEC *Survey Protocol for State-listed Breeding Grassland Bird Species* specifically indicates that completed breeding bird survey reports should include an indication of "whether any behaviors designated as 'probable' or 'confirmed' breeding were observed, following Breeding Bird Atlas codes" (NYSDEC, 2022). This suggests that probable and confirmed breeding behaviors, rather than possible breeding behaviors or nonbreeding essential behaviors, are typically used for identifying occupied breeding habitat. In addition, publicly available NYSDEC guidance includes the following description of identifying occupied habitat (NYSDEC, 2021):

> *In most cases, identification of a location as occupied habitat requires more than just a single observation of a listed species at a location. For example, a single observation of an endangered or threatened bird species flying over a field is not sufficient to classify that field as occupied habitat under the regulations. However, if that same protected bird species is observed using the field for breeding (i.e., nesting or raising young), it is likely that the field would be classified as occupied habitat.*

Therefore, based on the NYSDEC's guidance, ORES should find that an open field surveyed following current NYSDEC survey protocols, and containing only a single breeding or wintering season observation of a threatened or endangered grassland bird species (without probable or confirmed breeding), does not constitute occupied breeding habitat or occupied wintering habitat (as applicable). Rather, additional evidence should be required to make such a determination. Returning to the criteria that EDR identified previously herein, additional evidence for grassland bird occupied breeding habitat within an open field would typically be in the form of consistent use (i.e., multiple observations of the species in the same field during the same breeding season) combined with at least one observation of probable or confirmed breeding behavior. ORES should also consider migratory periods when evaluating the potential presence of occupied breeding habitat and occupied wintering habitat, as these periods overlap considerably with the breeding and wintering seasons.

Furthermore, although a threatened or endangered bird species may exhibit essential behavior in the form of foraging or feeding, this does not necessarily indicate that occupied breeding habitat is present. As discussed previously, raptors often exhibit foraging and feeding behavior during migration, outside of the breeding and wintering seasons.

In addition, an observation of foraging or feeding does not necessarily correlate to the presence of a breeding territory, wintering territory, nest, or roost location in the vicinity. For example, if a **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** were to exhibit foraging or feeding behavior (e.g., diving at a group of ducks on the edge of a pond, visiting a deer carcass, stealing food from another bird, etc.), such an observation would not indicate that occupied breeding habitat or occupied wintering habitat is present in that location. Rather, there would need to be additional evidence to supporting breeding (in the form of probable or confirmed breeding behavior) or wintering (in the form of concentrated observations in suitable roosting habitat for the species during the appropriate time of year). In this example, ORES and the NYSDEC would typically require evidence of a nest to identify occupied breeding habitat or evidence of a roost to identify occupied wintering habitat.

As another example, if an adult **BEGIN CONFIDENTIAL INFORMATION<** [redacted] **>END CONFIDENTIAL INFORMATION** were to exhibit foraging behavior in a pond during the spring migration period, but the individual did not exhibit probable or confirmed breeding behavior, one could reasonably conclude that the species was present, and that breeding was 'possible' (eBird, 2024). However, if repeat visits to the same pond later in the spring and summer resulted in no additional observations of the species, it is unlikely that ORES or the NYSDEC would conclude that the pond represented occupied breeding habitat, as there would be no evidence of courtship, reproduction, nesting, or raising young. Rather, there would be a single possible breeding observation that coincided with spring migration.

Finally, the Applicant and EDR encourage ORES to review past renewable energy facility proceedings and occupied habitat take determinations made by the NYSDEC and/or ORES. Although there has been some variability in the approach, for many projects, occupied breeding habitat has been defined for grassland bird species based on evidence of probable and/or confirmed breeding rather than presence, possible breeding, or observations with foraging behavior alone. EDR offers the following examples:

- **BEGIN CONFIDENTIAL INFORMATION<** [redacted]

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Conclusions

The Applicant and EDR have identified eight open fields for which modifications to the ORES occupied habitat take estimate are recommended. These modifications should be made in consideration of the studies completed for the Facility, EDR's Occupied Habitat Analysis (EDR, 2024), discussions that took place during the meeting held on August 22, 2024, and the additional information presented herein. The Applicant and EDR recommend that ORES staff perform further review of this information to ensure the final occupied habitat take estimate accurately reflects the extent of occupied habitat and the Facility's potential impacts to such habitat.

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James Muscato (Young/Sommer LLC)

Attachments: Attachment 1: Figure

Attachment 1

Figure

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