Wildlife Site Characterization Report

Grass River Solar Project

St. Lawrence County, New York

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Acronyms and Abbreviations

AC	Alternating Current
Audubon	National Audubon Society
BBA	NYS Breeding Bird Atlas
BBS	USGS Breeding Bird Survey
BCA	NYSDEC Bird Conservation Areas
BCC	USFWS Bird of Conservation Concern
BCI	Bat Conservation International
CBC	Audubon Christmas Bird Count
CH	USFWS Critical Habitat
EAF	Environmental Assessment Form
ECOS	Environmental Conservation Online System
ERM	Environmental Resource Mapper
ESA	Endangered Species Act
FE	Federal Endangered Species
FT	Federal Threatened Species
IBA	Audubon Important Bird Area
IPaC	USFWS Information for Planning and Consultation
MW	Megawatt
NHD	National Hydrography Dataset
NLCD	National Landcover Dataset
NRCS	Natural Resource Conservation Service
NWI	National Wetland Inventory
NYCRR	New York Codes of Rules and Regulations
NYNHP	New York Natural Heritage Program
NYSDEC	New York State Department of Environmental Conservation
NYSOA	New York State Ornithological Association
ORESET	Office of Renewable Energy Siting and Electric Transmission
PADUS	Protected Areas Database of the United States
SE	State Endangered Species
SSC	State Species of Special Concern
ST	State Threatened Species

USFWS	United States Fish and Wildlife Service
USGS	United Stated Geologic Survey
WRP	Wetland Reserve Program

1.0 INTRODUCTION

CS Grass River Solar, LLC, a subsidiary of CS Energy, LLC (hereafter, CS Energy) is proposing to develop approximately 550 acres of an overall approximately 1,384-acre area of land Towns of Waddington and Madrid in St. Lawrence County, New York into an approximately 80 megawatt (MW) alternating current (AC) solar energy generation facility (the Project). The proposed Project is approximately centered on the GPS coordinates [redacted] (Figure 1, hereafter "Project Area").

Tetra Tech prepared a wildlife site characterization in accordance with the Final Chapter XI, Title 16 of the New York Codes of Rules and Regulations (NYCRR) 1100-1.3(g) regulations (Part 1100) under the New York State Office of Renewable Energy Siting and Electric Transmission (ORESET) program in September 2024. This code requires the submittal of a wildlife site characterization during the early stages of planning and development process for the Project to determine the potential for suitable habitat for special-status species to be present in the vicinity of the Project, and the subsequent need for wildlife surveys. Since the original submission, CS Energy has altered the Project parcel boundaries under consideration for development. Thus, Tetra Tech has prepared this updated wildlife site characterization report to account for the new area included in the potential Project footprint.

1.1 Project Description

The Project is a proposed 80 MW-ac photovoltaic single-axis tracker solar power generation project. The project is currently expected to enter construction in late 2026 or early 2027 and will produce power for up to 40 years. The project is expected to generate enough clean renewable electricity each year to power approximately 20,000 New York households. Current plans for the project have it located across several parcels, which will either be leased or purchased by the project entity.

The facility will interconnect to the New York power grid in the Town of Madrid, tapping into the 115 Kilovolt (kV) transmission line which connects to the existing Brady and North Ogdensburg substations. The project is sited on a mix of farmland, scrubland, and forested areas to balance the competing concerns and interests specific to each cover type.

CS Energy will develop the project and on completion of the permitting and development, will carry out the construction of the facility. The facility will consist of PV modules on single axis tracking structures that follow the sun throughout the day, inverters which convert direct current to alternating current,

electrical collection systems between the panel arrays, and a new substation to deliver power to the transmission line. Complimentary facility areas will include access roads, fencing, storm water management systems, and temporary construction areas for equipment.

For the purposes of this report, wildlife habitats and observation data were considered both within the Project Area and also within a "Study Area", which is comprised of a 5-mile radius around the Project Area; this analytical zone is consistent with Part 1100 regulations (Section 1100-1.3(g)(1)). Figures 1 and 2 depict the location of the Project and the Study Area, respectively.

2.0 METHODS

This wildlife site characterization report was developed to assess the potential for federally and state listed species and the species of greatest conservation concern to occur within and in the vicinity of the Project Area. The methodology used was consistent with the ORESET Final Regulations, as well as general United States Fish and Wildlife Service (UFWS) and New York State Department of Environmental Conservation (NYSDEC) guidelines.

The characterization was completed by examining publicly available sources and submitting Project-specific agency regulatory information requests. Within this report, federally listed species are defined as those that are federally endangered (FE), threatened (FT). State listed species include those that are State Endangered (SE), State Threatened (ST). Other statuses considered herein include state Species of Special Concern (SSC) and USFWS Birds of Conservation Concern (BCC). Species with one of any of these statuses is considered "special-status", while listed species references refer specifically to species with listings under the state and/or federal endangered species acts.

2.1 Publicly Available Data Sources

The data sources used for this report include:

- Bat Conservation International (BCI) bat range information (BCI 2024)
- Cornell Lab of Ornithology eBird (eBird 2025)
- National Audubon Society (Audubon) Christmas Bird Count (CBC) (Audubon 2024a)
- Audubon Important Bird Areas (IBA) (Audubon 2024b)
- Audubon "Survival by Degrees" climate change model (Audubon 2024c)

- National Hydrography Dataset (NHD) (United States Geological Service [USGS] 2024a)
- National Land Cover Data (NLCD) (USGS 2024b)
- National Wetland Inventory (NWI) (USFWS 2024a)
- NYSDEC Bird Conservation Areas (BCA) (NYSDEC 2024a)
- NYSDEC Breeding Bird Atlas III (BBAIII) (eBird 2025)
- NYSDEC Environmental Resource Mapper (NYSDEC ERM; NYSDEC 2025a)
- NYSDEC Freshwater Wetlands (NYSDEC 2024a)
- NYSDEC Environmental Assessment Form Mapper (NYSDEC EAF Mapper; NYSDEC 2025b)
- NYSDEC Nature Explorer (NYSDEC 2024c)
- NYSDEC New York Natural Heritage Program (NYNHP) Information Services (NYNHP 2024)
- New York State Ornithological Society (NYSOA) sighting archives (NYSOA 2024)
- Protected Areas Database of the United States (PADUS; USGS 2024b)
- USGS Breeding Bird Survey (BBS) (USGS BBS; USGS 2024c)
- USGS National Landcover Dataset (NLCD) (USGS 2024d)
- USFWS Designated Federal Listed Species Critical Habitat (CH) (USFWS 2024b)
- USFWS Environmental Conservation Online System (ECOS) (USFWS 2024c)
- USFWS Information, Planning, and Consultation (IPaC) (USFWS 2025d)

Local bird observation information was limited to eBird occurrences and those contained in NYSOA observations. Local birding organizations were not identified that could contain additional information on avian sightings in the Study Area vicinity.

2.2 Agency Information Requests

The NYNHP maintains a list of rare, threatened, and endangered species occurrence maps throughout the state. Tetra Tech submitted an initial NYNHP request for the Project Area on July 11, 2024. A response was received on August 26, 2024. The NYNHP response letter and report of rare or state-listed animals and plants, and significant natural communities is included as Attachment A.

The USFWS IPaC is a database that contains a list of federally listed (i.e., endangered, threatened, or candidate) species throughout the country. A formal species list request was submitted through the online IPaC portal. This species list is provided in Attachment B1.

3.0 RESULTS

3.1 Publicly Available Data Sources – Wildlife Observations

3.1.1 NYSDEC ERM & NYSDEC EAF Mapper

The NYSDEC ERM and NYSDEC EAF Mapper were reviewed to determine the presence of state-listed threatened and endangered species within the Study Area (NYSDEC 2025a, NYSDEC 2025b). The NYSDEC ERM provides information on unique geological features, state-regulated freshwater wetlands, rare plants and animals, base flood elevation, waterbody information for lakes, rivers, estuaries, and streams, significant natural communities, and imperiled mussel areas within New York State. It also enables filtering of areas to determine if any of the above-listed features are documented within the Project or Study Area.

The NYSDEC ERM did not identify any Significant Natural Communities within the Project Area but identified three within the surrounding Study Area, including Waddington Cedar Rock Flats, Lisbon Swamp, and Brandy Creek Swamp, [redacted]. Multiple occurrences of rare plants or animals are located within the Project Area and surrounding Study Area. No imperiled mussel waters were identified by the NYSDEC ERM. Results of the NYSDEC ERM search are included as Attachment C.

The NYSDEC EAF mapper generates an EAF form and answers to Part 1 of the form, including information on sensitive areas potentially present within the Project Area, such as a Critical Environmental Areas, archaeological sites, wetlands, and threatened or endangered species. The EAF mapper indicated the proposed Project Area did not contain Critical Environmental Areas, National or State Register of Historic Places or State Eligible Sites, or remediation sites. The EAF mapper did indicate archeological sites and wetlands or other regulated waterbodies present within the Project Area along with one threatened or endangered animal, [redacted]. Results of the EAF mapper are included as Attachment D.

3.1.2 USFWS ECOS & IPaC

Tetra Tech submitted an IPaC and ECOS database search for the Project Area in January 2025 (USFWS 2025c and USFWS 2025d). Summaries of database search results, habitat requirements, and potential for occurrence within the Project Area are summarized in Table 1 and Table 2.

The IPaC results identified one federally endangered, [redacted] for the Project Area. The species list generated from IPaC is included as Attachment B1, with the supporting ECOS results included in Attachment B2. The determination key for [redacted] yielded a determination that the proposed Project may affect tricolored bat, but is not likely to result in unauthorized take of the [redacted]. The determination key technical assistance letter is included within Attachment B1. 13 migratory bird species, designated as USFWS Birds of Conservation Concern (BCC), were identified as potentially occurring within the Project Area (Table 2). Avian species with BCC designation are not afforded any additional federal protections but are non-game species identified by the federal government as conservation priorities (USFWS 2008). While not tracked within IPaC, it should be noted that native migratory birds receive a degree of protections from the Migratory Bird Treaty Act, which offers some protection from intentional take of individuals and active nests. The Bald and Golden Eagle Protection Act also offers additional protection for both eagle species.

Table 1. USFWS IPaC List of Threatened and Endangered Species

Common Name (Species Name)	Status	Habitat Requirements	Potential Suitable Habitat Identified within Project Area
northern long-eared bat (*Myotis septentrionalis*)	Endangered	Underneath bark, in cavities or crevices of both live and dead trees, cooler places such as caves and mines. Hibernate in winter in large, humid caves and mines with no air currents and constant temperatures, referred to as hibernacula.	[redacted]
tricolored bat (*Perimyotis subflavus*)	Proposed Endangered	Leaf clusters of live or recently dead deciduous hardwood trees.	
monarch butterfly (*Danaus plexippus*)	Proposed Threatened	Milkweed and other flowering plants are needed; breeding only where milkweeds are found.	
Suckley's cuckoo bumble bee (*Bombus suckleyi*)	Proposed Endangered	Prairies, grasslands, meadows, woodlands, agricultural and urban areas.	

*Candidate species and species under review are not afforded any federal protections until listing status is confirmed.

Table 2. USFWS IPaC List of BCC Species with associated state status

Common Name (Species Name)	Status[1]	Habitat Requirements	Potential Suitable Habitat?
Bald Eagle (*Haliaeetus leucocephalus*)	ST, Non-BCC vulnerable	Undisturbed areas along large bodies of water, large trees for nesting	[redacted]

Common Name (Species Name)	Status[1]	Habitat Requirements	Potential Suitable Habitat?
Belted Kingfisher (*Megaceryle alcyon*)	BCC, SSC	Rivers, lakes, ponds	[redacted]
Black-billed Cuckoo (*Coccyzus erythrophthalmus*)	BCC	Dense woodlands and thickets with deciduous and evergreen trees, often near water	
Bobolink (*Dolichonyx oryzivorus*)	BCC, STP	Tall grasslands, uncut pastures, overgrown fields and meadows and prairies. Marshes and agricultural fields during migration.	
Chimney Swift (*Chaetura pelagica*)	BCC	Urban areas, tall dead trees adjacent to lakes and rivers	
Eastern Meadowlark (*Sturnella magna*)	BCC, STP	Pasture/hayfields, old fields, grasslands, native barrens and savannas, open areas	
Evening Grosbeak (*Coccothraustes vespertinus*)	BCC	Forests, often with mixed deciduous and coniferous trees, particularly fruit-bearing trees in winter, associated with box elder expansion in eastern North America	
Golden Eagle (*Aquila chrysaetos*)	SE, Non-BCC vulnerable	Partially or completely open country, especially near mountains, hills, and cliff. Tundra, shrublands, grasslands, farmland	
Lesser Yellowlegs (*Tringa flavipes*)	BCC	Breed in meadows and open woods in boreal zone, mudflats, agricultural fields, shorelines, beaches in migration/winter	

Common Name (Species Name)	Status[1]	Habitat Requirements	Potential Suitable Habitat?
Pectoral Sandpiper (*Calidris melanotos*)	BCC	Breed in wet tundra, migration/winter habitat includes mudflats, agricultural fields, shorelines	[redacted]
Rose-breasted Grosbeak (*Pheucticus ludovicianus*)	BCC	Mixed forest and thickets, parks, backyards	
Short-billed Dowitcher (*Limnodromus griseus*)	BCC	Breed in arctic, migration/winter habitat includes mudflats, shorelines	
Wood Thrush (*Hylocichla mustelina*)	BCC	Wooded habitats, mixed and deciduous forests	

BCC – Birds of Conservation Concern, STP- State high priority species of Greatest Conservation Need, ST– State-listed Threatened species, SE- State-listed Endangered Species, SCC – State-listed Species of Conservation Concern

3.1.3 New York Natural Heritage Program

The NYNHP is a combined effort by the State University of New York – College of Environmental Science and Forestry and the NYSDEC, which maintains a long-term comprehensive database of rare plants, animals, and natural communities in New York State. The NYNHP also promotes conservation guidelines to facilitate the conservation of New York State's biodiversity.

Tetra Tech submitted a NYNHP request on July 11, 2024 and NYNHP responded with a report of rare or state-listed animals and plants, and significant natural communities that their database indicated occur in the vicinity of the Project site on August 26, 2024 (Attachment A). Tetra Tech submitted a revised request for the new project footprint in January 2025 but has not yet received a response. The NYNHP report indicated [redacted] has been documented in the vicinity of the Project site along with five plant species including [redacted]

3.1.4 Special-status Bat Information – BCI, NYSDEC, IPaC

Tetra Tech reviewed the BCI and NYSDEC websites to determine the potential presence of state listed bat species in the Project Area and/or Study Area. The BCI website indicated that the Project Area is in the documented range for northern long-eared bat (FT/SE), Indiana bat (*Myotis sodalis*; FE/SE), tricolored bat (*Perimyotis subflavus*, FE/SE), and small-footed myotis (*Myotis leibii*; SSC) (BCI 2024). These species all utilize forested habitats for temporary and maternity roosting in some situations, but typically establish hibernacula roosts in caves, abandoned mines, or similar structures.

Tetra Tech also reviewed the NYSDEC website to determine the availability of data regarding the potential presence of the northern long-eared bat within the Project Area/Study Area. According to the NYSDEC Long-eared Bat Occurrences by Town document, with data accurate as of August 24, 2022, no known summer or winter occurrences of northern long-eared bat are recorded in the Towns of Waddington or Madrid (NYSDEC 2022). Some potential exists that a maternity roost for northern long-eared bat or other non-status bat species could establish in forested portions of the Project Area, but none are currently known.

The IPaC search indicated that tricolored bat and northern long-eared bat have potential to occur in the vicinity. However, for reasons described above, these species are unlikely to be significantly impacted by the Project. This is corroborated by the determination key for northern long-eared bat, which yielded a determination that the proposed Project is not likely to result in unauthorized take of the northern long-eared bat (USFWS 2024d).

3.1.5 NYSDEC – Nature Explorer

The NYSDEC Nature Explorer contains information on rare wildlife occurrences and significant natural communities throughout New York State (NYSDEC 2024c). Tetra Tech performed a data search within the Towns of Waddington and Madrid in St. Lawrence County, New York along with the specific Project Area. The NYSDEC Nature Explorer identified 14 species and two natural communities within the Town of Madrid and 25 species and one natural community within the Town of Waddington. More specifically, the NYSDEC Nature Explorer identified four flowering plant species potentially located within the [redacted] Explorer results are included as Attachment E.

3.1.6 eBird and NYS Breeding Bird Atlas III

Tetra Tech performed a review of the Cornell University eBird database for bird species recorded in the Study Area. eBird is a citizen science database with a thorough review process, and thus presents a reasonable estimate of species assemblage for a given region. Tetra Tech requested and downloaded the St. Lawrence eBird dataset and used GIS to filter and outline all bird observations within the Study Area from 2020-2024. There were 202 taxa recorded within the Study Area from 2020-2024, with 24 of those listed as T&E, special concern or high priority species of greatest conservation need in New York State (Attachment F).

Upon examining the eBird data, a few observations in the immediate vicinity (i.e. within 0.5 miles) of the Project Area are of note. Two special status species were observed in the immediate vicinity of the Project Area, [redacted], also

[redacted]. A list of species observed in the Study Area in eBird from 2020-2024 is included as Attachment F.

The New York BBAIII is a statewide inventory of the breeding birds of New York State. Two efforts have been conducted in the past, one between 1980-1985 and another between 2000-2005. A third effort, which began in 2020, is currently underway, with up-to-date data available through the eBird BBAIII portal (eBird 2025). The Project Area is divided by four atlas blocks, three of which are not priority blocks and have marginal effort. The majority of the Project Area lies within the Waddington SW block, which only has five coded species, none of which are special status species (eBird 2025). The western portion of the Project Area extends into the Sparrowhawk Point SE block, which only has two coded species, none of which are special status species (eBird 2025). Similarly, the northern extent of the Project Area extends into the Waddington CW block, which also has minimal effort and has 14 coded species, none of which are special status species (eBird 2025). The far northwestern portion of the Project Area extends into the Sparrowhawk Point CE block, which is a priority block marked "complete," with 91 coded species, listed in Attachment F (eBird 2025). This block also includes habitat along the St. Lawrence River shoreline, which is not reflective of habitat in the Project Area, much of the rest of the block has a similar mixture of agricultural and open land and forest. Four special status species were observed in the Sparrowhawk Point CE block, including least bittern and northern harrier, both listed as state threatened, and American bittern and osprey (*Pandion haliaetus*), listed as species of special concern. These species were recorded away from the portion of the block overlapping the Project Area and were associated with the St. Lawrence River shoreline and the Sparrowhawk and Whitehouse Point areas, [redacted] of the Project Area.

3.1.7 USGS Breeding Bird Survey (BBS)

The USGS BBS database is a long-term cooperative effort between the USGS Patuxent Wildlife Research Center and Environment Canada's Canadian Wildlife Service to monitor the status and trends of North American bird populations (USGS 2024c). This effort is conducted by qualified birders and is timed to occur during the peak of the breeding bird season, approximately mid-June in northern New York State.

A review of the five most recent survey years of the BBS was conducted and utilized the closest route to the Project Area, the Waddington route, which partially transects the Project Area. While access to the USGS BBS database was limited due to the website down with no links working when accessed July 11,

2024, a species list across all years through 2022 was included for the Waddington route (Attachment G). Due to the inaccessible data through the USGS site, and the fact that the BBS has been run since 1966, it is not possible to determine if sightings of listed species were recent. However, multiple listed species, including pied-billed grebe (*Podilymbus podiceps*), upland sandpiper (*Bartramia longicauda*), and northern harrier, listed as state threatened, and eastern whip-poor-will (*Antrostomus vociferus*), American bittern, sharp-shinned hawk (*Accipiter striatus*), horned lark, and vesper sparrow (*Pooecetes gramineus*), listed as a species of special concern, have been recorded on this route during its history.

3.1.8 Audubon Important Bird Areas & Christmas Bird Counts

The Audubon IBAs are places of significant important to a multitude of bird species across various portions of their life history, including breeding sites, migration stopover locations, and generally high-quality and non-fragmented habitats. A search of the online Audubon mapper for IBAs, which displays the boundary locations for various classifications of IBAs throughout the US, was conducted in order to identify any IBAs near the Project Area. No IBAs overlap with the Project Area but two overlap with the Study Area, including the Lisbon Grasslands IBA, which extends to approximately [redacted] of the southernmost extent of the Project Area (Audubon 2024b). This site includes a vast mosaic of wetlands and grasslands in an agricultural landscape and includes both privately owned land and Wildlife Management Areas (WMAs) administered by NYSDEC (Audubon 2024b). Additionally, the Lower St. Lawrence River IBA is also located approximately [redacted] of the Project Area following the shoreline of the St. Lawrence River (Audubon 2024b).

The Audubon CBC is conducted each year between December 14th and January 5th to monitor bird populations in North America. The counts occur within a 15-mile diameter circle around a pre-determined center point. The nearest CBC circle to the Project Area, the Canton-Potsdam count circle, is located approximately 1.75 miles to the southeast (Audubon 2024a). While the count circle does not include any portions of the Project Area, it overlaps with the southeastern portion of the Study Area and likely represents a similar wintering bird population compared to that in the Project Area. CBC data from the most recent count years publicly available, 2018-2023, are presented in Attachment H. Count totals ranged between 40 and 48 species from 2018-2023 and included listed species such as golden

[redacted]

[redacted]

3.1.9 NYSDEC Bird Conservation Areas

NYSDEC has designated certain areas as BCAs across New York State. BCAs were established in 1997 to "safeguard and enhance bird populations and their habitat on state lands and waters" (NYSDEC 2005). BCAs are likely to act as a concentrating point for bird movements and migrations, as the areas are typically managed for creating ideal bird habitat. If located near renewable energy development, BCAs have the potential to concentrate avian populations in the vicinity of solar farms. The NYSDEC BCA mapper identified the Upper and Lower Lakes WMA as the nearest BCA to the Project Area, which is located approximately [redacted]. Given the distance of the BCA from the Project Area, it is not anticipated there will be any interaction between the proposed development and any BCAs.

3.1.10 New York State Ornithological Association

NYSOA maintains a database of New York State ornithological records through the compilations of field reports from dedicated birders throughout the state. NYSOA provides a searchable archive of the quarterly publication, *The Kingbird*, which provides seasonal avian records summaries from regions within New York State (NYSOA 2024). The most recent five years of data available within *The Kingbird* archive, 2018-2022, were searched for records of special status species reports within the Towns of Waddington and Madrid in St. Lawrence County, New York. 29 species were noted in the Towns of Waddington and Madrid from 2018-2022 in *The Kingbird*. An observation of an [redacted] listed as state endangered, from the Town of Waddington on March 17, 2020, was recorded, likely an individual migrating north. [redacted]

shouldered hawk and common loon (*Gavia immer*), species of special concern, were observed but mostly associated with large, forested tracts and the St. Lawrence River, both away from the Project and Study Area. NYSOA breeding bird atlas count data are included as Attachment I.

Table 3. Species Documented in Observations in the Towns of Waddington and Madrid in NYSOA The Kingbird Archives, 2018-2022

Species	Status
Snow Goose	None
Ross's Goose	None
Cackling Goose	None
Canada Goose	None
Tundra Swan	None
Wood Duck	None
Northern Pintail	None
Mallard	None
Ring-necked Duck	None
Common Merganser	None
Sandhill Crane	None
Lesser Yellowlegs	None
Common Loon	SSC
Pacific Loon	None
Double-crested Cormorant	None
Golden Eagle	SE
Red-shouldered Hawk	SSC
Blue-headed Vireo	None
Sedge Wren	ST
Horned Lark	SSC
Cliff Swallow	None
Barn Swallow	None
Bohemian Waxwing	None
Pine Grosbeak	None

Species	Status
Hoary Redpoll	None
Pine Siskin	None
Brown-headed Cowbird	None
Northern Parula	None
Black-throated Blue Warbler	None

3.1.11 Review of Climate Change Modeling for Birds

The Part 1100 regulations require a review of Audubon's climate change modeling for special-status bird species documented within this wildlife characterization report. Audubon's Survival by Degrees study models the potential range shifts of focal avian species based on different climate change scenarios. The model indicates that 389 out of 604 North American bird species are at risk of significant range shifts from increasing temperatures due to climate change. Data from eBird, USGS, BBS, and Global Biodiversity Information Facility was used to inform the model and predict potential range shifts (Audubon 2024c).

The Survival by Degrees study categorizes the relative impacts to a species range as stable (i.e. no significant range shift), low, moderate, and high. These impacts are forecast based on modeling range shifts given global temperature increases of 1.5°, 2.0 °, and 3.0 ° Celsius. Model results were queried using the 13694 zip code, which includes the Project Area and Study Area. Results for special-status species identified in state and federal database searches are displayed in Table 4. At a 1.5° Celsius increase, four species are expected to be moderately vulnerable to range shifts, with no species in the high vulnerability category (Table 4). As the temperature increases by 2° Celsius, seven species are expected to be moderately vulnerable to range shifts, with no species yet in the high vulnerability category (Table 4). However, at a 3° Celsius increase, four species, bobolink, eastern whip-poor-will, evening grosbeak (*Coccothraustes vespertinus*), and wood thrush (*Hylocichla mustelina*) are predicted to be a high vulnerability species while six other species are predicted to be moderate vulnerability species (Table 4).

Table 4. Audubon Survival by Degrees Range Shift Impacts to Special-Status Species in the Vicinity of the Project Area

Common Name	Seasonal Range within the 5-mile Study Area	Overall Species Vulnerability Status for each Warming Scenario		
		+1.5 °C	+2.0 °C	+3.0 °C
American Bittern	Breeding – uncommon	Low	Low	Low
Bald Eagle	All seasons – common	Low	Low	Low
Belted Kingfisher	Breeding – common	Stable	Stable	Stable
Black-billed Cuckoo	Breeding – uncommon	Low	Low	Low
Bobolink	Breeding – uncommon	Moderate	Moderate	High
Chimney Swift	Breeding – common	Stable	Stable	Stable
Common Loon	Breeding – uncommon	Low	Low	Moderate
Cooper's Hawk	All seasons - uncommon	Stable	Stable	Stable
Eastern Meadowlark	Breeding – uncommon	Low	Low	Moderate
Eastern Whip-poor-will	Breeding – rare	Moderate	Moderate	High
Evening Grosbeak	Winter – uncommon	Moderate	Moderate	High
Least Bittern	Breeding – uncommon	Stable	Stable	Stable
Northern Harrier	All seasons – uncommon	Low	Low	Low
Osprey	Breeding – common	Stable	Stable	Stable
Pied-billed Grebe	Breeding – uncommon	Stable	Stable	Stable
Red-shouldered Hawk	Breeding – uncommon	Stable	Stable	Stable
Rose-breasted Grosbeak	Breeding – common	Low	Low	Moderate
Sedge Wren	Breeding – rare	Moderate	Moderate	Moderate
Sharp-shinned Hawk	All seasons – uncommon	Low	Moderate	Moderate
Upland Sandpiper	Breeding – rare	Stable	Stable	Stable
Vesper Sparrow	Breeding – uncommon	Low	Moderate	Moderate

Common Name	Seasonal Range within the 5-mile Study Area	Overall Species Vulnerability Status for each Warming Scenario		
		+1.5 °C	+2.0 °C	+3.0 °C
Wood Thrush	Breeding – common	Low	Moderate	High

New York State has declared an urgent need for deployment of thousands of megawatts in additional renewable generation capacity across New York to meet its 70% by 2030 goal and has done so fully aware of the attendant environmental impacts of that deployment effort. However, as the New York State Public Service Commission acknowledged in its adoption of the 2016 Clean Energy Standard Order, the impacts from construction and operation of renewable energy generation must be balanced against the considerable environmental benefits of clean energy, and the environmental harms resulting from inaction in addressing climate change (Order Adopting a Clean Energy Standard in Case 15-5-0302 [August 1, 2016] pg. 7, 71 [noting that "inaction on air pollution and climate change is unacceptable"], pg. 153-54 and Appendix X). As the PSC warns, "climate change will cause not only sea level rise, heat waves, and extreme weather events, but also threatens massive economic and lifestyle disruption from damage to agriculture, water resources, public health, energy and communication systems, and the natural ecosystems that define and support communities."

3.2 Publicly Available Data Source – Habitat

3.2.1 National Land Cover Data

The NLCD is a modelled dataset that characterizes landcover throughout the continental United States. A review of the NLCD found that cultivated crops and hay/pasture represent 785.62 acres (56.74%) of the overall Project Area acreage (Table 5, Figure 4). The second most dominant cover types within the Project Area are woody wetlands, which collectively represent 268.87 acres (19.42%). Within the Study Area, hay/pasture and cultivated crops also collectively represent the largest land cover types totaling 28,156.39 acres (38.49%). The next most dominant cover type within the Study Area were various forest landcover types.

Table 5. National Land Cover Data within the Project Area and Study Area, St. Lawrence County, New York

NLCD Land Cover	Project Area		Study Area	
	Acres	Percent	Acres	Percent
Barren Land	0.00	0.00%	17.09	0.02%
Cultivated Crops	112.69	8.14%	13,003.70	17.78%
Deciduous Forest	116.70	8.43%	9,850.31	13.47%
Developed, High Intensity	0.32	0.02%	63.90	0.09%
Developed, Low Intensity	5.29	0.38%	831.39	1.14%
Developed, Medium Intensity	2.87	0.21%	341.84	0.47%
Developed, Open Space	30.26	2.19%	2,347.42	3.21%
Emergent Herbaceous Wetlands	47.58	3.44%	2,156.71	2.95%
Evergreen Forest	90.07	6.51%	4,816.05	6.58%
Hay/Pasture	672.93	48.61%	15,152.69	20.71%
Herbaceous	1.08	0.08%	861.61	1.18%
Mixed Forest	28.17	2.03%	1,793.77	2.45%
Open Water	0.00	0.00%	3,171.82	4.34%
Shrub/Scrub	7.67	0.55%	849.84	1.16%
Woody Wetlands	268.87	19.42%	17,868.39	24.43%
Unclassified	0.00	0.00%	22.90	0.03%
Total	**1,384.49**	**100.00**	**73,149.43**	**100.00**

3.2.2 NWI, NHD, and NYSDEC

There are approximately 13,367 acres of NWI mapped wetlands/waterbodies over the approximately 73,149 -acre Study Area (Table 6, Figure 5, Figure 6)(USFWS 2024a). The majority of these features are forested wetlands that are interspersed with agricultural areas. The St. Lawrence River is additionally

in relatively close proximity to the Study Area, although this is not documented specifically in the NWI dataset. The Grass River is additionally proximal to the Study Area.

Several NWI wetlands were documented within the Project Area. These wetlands are predominantly located in forest areas, with some other emergent or scrub-shrub wetlands associated with local stream drainages. Wetlands in the Project Area are categorized as PEM5C, PEM5E, PFO1C, PFO1E, PSS1C, PSS1E, PSS1F, and PUBHx. A wetland delineation occurred in late summer 2024, but was not inclusive of the entirety of the new proposed set of project parcels. The wetland delineation will be updated during early summer 2025.

Table 6. National Wetland Inventory mapped wetlands within the Project and Study Area

NWI Wetlands	Acres (Project Area)	Percent of Project Area	Acres (Study Area)	Percent of Study Area
Freshwater Forested/Shrub Wetland	112.33	8.11%	11,697.32	15.99%
Riverine	0	0%	437.93	0.60%
Lake	0	0%	245.95	0.34%
Freshwater Pond	0.27	0.02%	46.07	0.06%
Freshwater Emergent Wetland	36.10	2.61%	940.06	1.29%
Total Wetlands	**148.70**	**10.74%**	**13,367.33**	**18.27%**

Several NHD stream segments are identified within the Project Area, with many additional NHD streams identified within the Study Area (USGS 2024a). These streams are shown in Figure 7. The largest indicated drainage within the Project Area is located in the central portion, where a branching stream appears to traverse pasture and emergent wetland areas shown in aerial imagery or mapped in other wetland databases.

Eighty-nine distinct NYSDEC-mapped wetland features are present within the Study Area, which make up approximately 10,380 acres of land (Figure 8) (NYSDEC 2024a). Of these features, the majority are

associated with inland wetland complexes which are predominantly forested. NYSDEC Freshwater Wetland mapping found that there are eight (8) state-mapped wetland features within the Project Area: SP-9, SP-10, SP-13, WT-28, WT-30, WT-31, WT-32, and WT-45. SP-9 and SP-13 only have small portions of the wetland within the Project Area. Of these features, SP-10 and WT-45 are the only features where the majority is located within the Project Area. SP-10 is 19.9 acres in total size and appears to be a mix of forested and emergent wetland areas. WT-45 has an area of 19.10 acres and appears to primarily be forested wetland. While many of these features are only minimally present within the Project Area, it should be noted that many features within the Project Area may have hydrologic connectivity to mapped features outside of the Project Area.

NYSDEC maps Little Sucker Brook and Tributaries within the Project Area; this stream has not been assessed by the NYSDEC. No other class C streams are mapped within the Project Area.

3.2.3 Designated Wildlife Critical Habitat

A review of the of the USFWS ECOS identified that no designated CH is found within or in the vicinity of the Project. CH is defined as areas that are essential to the conservation of a species that has been proposed for listing as endangered or threatened under the Endangered Species Act (ESA) (USFWS 2024b). CH is utilized for the conservation of imperiled species by guiding cooperation within the federal government. The nearest CH location is about 75 miles southwest of the Project along the eastern edge of Lake Ontario. The area is identified as CH for piping plover (*Charadrius melodus*) (USFWS 2024b). Given the distance from the Project Area of this CH, it will not be impacted by any activities within the Project Area.

3.2.4 Public Lands

Tetra Tech reviewed the USGS PAD-US database to assess any publicly held lands that may occur in the vicinity of the Project Area. The PAD-US includes information on “U.S. terrestrial and marine protected areas that are dedicated to the preservation of biological diversity and to other natural, recreation and cultural uses, managed for these purposes through legal or other effective means” (USGS 2024b). Properties in this database include those owned and managed by NYSDEC, USFWS, and other local, state and federal agencies.

Several protected areas are identified in the PAD-US within the Study Area (Figure 9). All protected areas identified within the Study Area are managed by the United State Natural Resource Conservation Service (NRCS). The only protected area that directly overlaps with the Project Area is an WRP easement (Figure 10). The WRP enrolls private lands in conservation easements to help protect wetland areas that were previously altered due to agricultural activities (NRCS 2024). The easement is located in the northernmost parcel of the proposed development area.

3.2.5 Landscape Features and Resources of Potential Concern within the Study Area

The Part 1100 regulations require an identification of unique natural areas or landscape features which may function to concentrate or funnel special-status species to the Project and the surrounding Study Area. The prominent landscape feature proximal to the Project and within the Study Area is the St. Lawrence River. The river and the associated riparian strip may serve as habitat for birds, bats, and other wildlife. Additionally, the Study Area is traversed by the Grass River which, although smaller than the St. Lawrence, presumably provides similar habitat value.

The Study Area contains approximately 13,367 acres of wetlands based on data reviewed in this assessment. Much of this acreage is contained within the river watersheds discussed in the previous paragraph as well as in commonly occurring forested wetlands. Given the prevalence of wetland areas in the vicinity of the Project Area, these areas may provide habitat for various species of wildlife but are not likely to cause concentrations of dispersing wildlife. Other portions of the Study Area are dominated by agricultural lands and deciduous forests, both of which provide habitat value for various wildlife species. However, given the uniformity of the landcover matrix in the vicinity, these habitats are not likely to concentrate wildlife in any meaningful way.

3.2.6 Biodiversity and Wind Siting Mapping Tool

The Part 1100 regulations suggest that the Nature Conservancy New York's "Biodiversity and Wind Siting Mapping Tool" be used to determine the potential for mapped ecological resources in the vicinity. Tetra Tech attempted to access this tool on July 30, 2024 and found it be non-functional. Furthermore, given the nature of this project (i.e., a ground-mounted solar development) and the fact that this tool is primarily designed with wind power in mind, it is not applicable to this project and is not likely to provide additional information that is not already contained in this report.

3.3 Evaluation of Current Habitat Suitability for Special-status Species

As discussed in Section 3.2, the Project Area contains approximately 681 acres of agricultural lands (cultivated crops and hay/pasture) cover types. There are several locations where these cover types occupy areas larger than 25 contiguous acres in size. A review of historic aerial imagery indicates that these areas are either rotationally planted as row crops or used as rangeland for cattle ranching. Aerial imagery suggests that many areas indicated as hay/pasture in the NLCD may in fact also be more appropriately categorized as natural grasslands. Depending upon the time of year and vegetative conditions of these areas, suitable grassland habitat for special-status species may occur within the Project Area. These species could additionally occur in scrub/shrub habitats or in gallery forests (i.e., those that border agricultural lands). In addition to grassland type habitats, there are approximately 191 acres of forestlands within the Project Area, of which approximately 62 acres are estimated to be forested wetlands. These areas may provide suitable habitat for forest-dependent species. The woody and emergent wetlands throughout the Project Area are likely to provide the highest quality habitat for wetland species, as well as foraging opportunities for more generalist species. Table 7 provides an overview summary of the special-status species that have been identified as having potential to be present in the vicinity through desktop review, and the relative presence of suitable habitat and subsequent likelihood to be observed in areas proximal to the Project site.

While there is potentially suitable habitat for a number of special-status species (Table 7), none of the species indicated below have been specifically identified within the Project Area. However, of the species identified through IPaC and NYSDEC searches, seven were formally listed by either New York

[redacted]

Lawrence River or other nearby large water bodies. Other special-status bird species anticipated to be present in the vicinity are designated as BCC or SSC. Avian communities associated with the Project Area and immediate vicinity are anticipated to be characterized during a winter raptor survey and grassland bird survey efforts, which will occur during late 2024/early 2025.

Of note is the potential presence of [redacted] within the Project Area. While [redacted] are not predicted to be present within the Project Area given the absence of caves or mines, this species

and other species of bat may be present in forested areas while roosting and in open habitats while foraging. Surveys may be needed to determine if maternity roost trees will be affected by Project activities if the project involves disturbance of forested habitats.

It should additionally be noted that [redacted] was identified as having potential to occur by the NYSDEC ERM. This state threatened species is most likely to be present in the vicinity of freshwater emergent wetlands that contain suitable overwintering areas (i.e., standing freshwater) surrounded by friable soils suitable for nesting. Surveys may be required to determine whether the species is present within the Project Area.

Table 7. List of Endangered, Threatened and Species of Special Concern Within or near the Grass River Solar Facility Project Area

Common Name (Scientific Name)	Status	Habitat Requirements	Presence and Suitability of Habitat in Project Area	Data within 5 Years in the Project Area
Birds				
[redacted]	ST	Undisturbed areas along large bodies of water for breeding; year-round resident	Breeding trees and large bodies of water for foraging not present.	No
	SCC, BCC	Areas with access to bodies of water for feeding and vertical earthen banks for nesting	Presence possible adjacent to wetland areas or streams	No
	SCC, BCC	Reside near dense woodlands and thickets, including aspen, poplar, birch, willow.	Potential habitat present in shrub/scrub and forested areas	No
	SCC, BCC	Tall grasslands, uncut pastures, overgrown fields and meadow and prairies.	Potential habitat present in agricultural and grassland areas	No
	SCC, BCC	Found in urban and suburban areas, may nest in hollow trees or caves in rural areas.	Unlikely, developed areas and/or caves are not present within the Project Area	No

Common Name (Scientific Name)	Status	Habitat Requirements	Presence and Suitability of Habitat in Project Area	Data within 5 Years in the Project Area
[redacted]	SCC	Farm fields, grasslands and wet fields. Nest on the ground and sing from exposed perches.	Potential habitat present in agricultural and grassland areas	No
	SE	Typically nests on cliff ledges or other sheltered and elevated locations; migrates for winter, is unlikely to breed in this portion of the United States.	Presence possible during migration, but not likely to nest due to absence of suitable habitat.	No
	ST	Typically nests in open grassy areas, often near wetlands. Nest is constructed from sticks and grass and is placed on the ground. Forages in open grassland areas.	Grassland and agricultural habitats within the Project Area may support breeding or foraging by this species.	No
	SSC	Nests in open habitats on the ground, often in fallow agricultural areas or rangeland.	Grassland and agricultural habitats within the Project Area may support breeding or foraging by this species.	No
	SSC	Nest on tall structures or trees, including man-made structures. Forages in areas of open water.	Presence unlikely, may occasionally flyover the Project Area.	No
	SSC	Forest raptor that, in the east, chiefly inhabits stands of bottomland hardwood, flooded deciduous swamps, and upland mixed forests. Nets placement is typically in large trees near the canopy.	Presence possible, good habitat likely present.	No
	SSC	Breed and reside in freshwater wetlands with tall vegetation.	Presence possible, good habitat likely present.	No
	ST	Breed and reside in freshwater wetlands with tall vegetation. Breeding is rare.	Presence possible, good habitat likely present.	No

Common Name (Scientific Name)	Status	Habitat Requirements	Presence and Suitability of Habitat in Project Area	Data within 5 Years in the Project Area
[redacted]	CC, CC	Breeds in deciduous and mixed forests in the eastern U.S. where there are large trees, moderate understory, shade and abundant leaf litter.	Presence likely possible, good habitat likely present	No
Mammals				
	/SE	Utilize a diversity of forested habitats for roosting, foraging, and establishing maternity roosts. Hibernacula are typically in caves, mines, or similar.	Presence possible, useable habitat likely present	No
	PE	Roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees. Winter found in caves and mines	Presence possible	No
	/SE	Roost mainly under exfoliating bark in forested areas. Maternity roosts typically near rivers, lakes, or other bodies of water. Hibernacula are caves or abandoned mines.	May roost in forested areas. Hibernacula or maternity roosts unlikely to be viable.	No
	SC	Summer roosts are rock fields or talus slopes. Winter hibernacula in caves or stone crevices.	Habitat not known to be present within the Project Area.	No
Insects				
	FC	Require milkweed and flowering plants. Feed on many flowers, but breed only where Milkweed is found	Presence likely, larval host plant present on-site	No
Reptiles				
	ST	Overwinters near or underwater. During nesting, females may be found within half a mile of their wintering sites. Typically resides in freshwater wetlands and vicinity.	Presence likely, good habitat available	No

BCC – Birds of Conservation Concern, ST– State-listed Threatened species, SE- State-listed Endangered Species, SCC – State-listed Species of Conservation Concern, FE – Federally Endangered

4.0 CONCLUSIONS

This report provides a summary of publicly available information, including agency data requests, online databases, reports, published literature, and geospatial data regarding wildlife and wildlife habitats within the Project Area, the Study Area, and surrounding lands, per Part 1100 regulations.

Based on this review, no state or federally listed avian species have been specifically documented utilizing the Project Area within the last 5 years. However, eBird data suggests that [redacted], [redacted] have been observed in the immediate vicinity, suggesting they have some potential to occur in habitats contained within the Project Area. Additionally, NYSOA archives indicate that [redacted] have been observed near the Project Area, suggesting they may occasionally be present in the vicinity. CS Energy is planning to conduct a winter raptor survey during winter 2024/2025 and a grassland breeding bird survey during 2025 in accordance with the most recent NYSDEC protocols to document any potential ongoing use of the Project Area by special-status species.

The Project Area is within the range of several species of special-status bat, including [redacted] and more. While these species may be found temporarily roosting in deciduous forests or foraging in open locations within the Project Area, no known maternity or hibernacula sites are present in the vicinity of the Project Area.

It should additionally be noted that [redacted] was identified as having potential to occur by the NYSDEC ERM. This state threatened species is most likely to be present in the vicinity of freshwater emergent wetlands that contain suitable overwintering areas (i.e., standing freshwater) surrounded by friable soils suitable for nesting. If development is slated for areas in the vicinity of [redacted] habitat, surveys may be required to determine whether the species is present within the Project Area. If the species is detected, mitigation measures may be required during construction for species protection.

Land use within the Project Area is mixed agricultural, rangeland, and deciduous forest that could provide habitat for special-status wildlife species. Wetland areas appear to be distributed across the Project Area; while most wetland appear to be associated with deciduous forests, there is also a stream drainage documented through the central portion of the site that likely has associated emergent

wetlands adjacent to it. Wetland habitats would constitute potential habitat for common avian species, as well as state special-status birds identified in this desktop assessment. Very few large contiguous areas of undeveloped habitat exist in the immediate vicinity with the exception of the waters and riparian areas surrounding the St. Lawrence and Grass Rivers. It is not anticipated that Project activities would impact wildlife usage of these habitats given that disturbance would be localized within the Project footprint. Regardless, surveys and siting considerations should take potential habitat into account, and any appropriate permits should be obtained should impacts to suitable habitat be considered.

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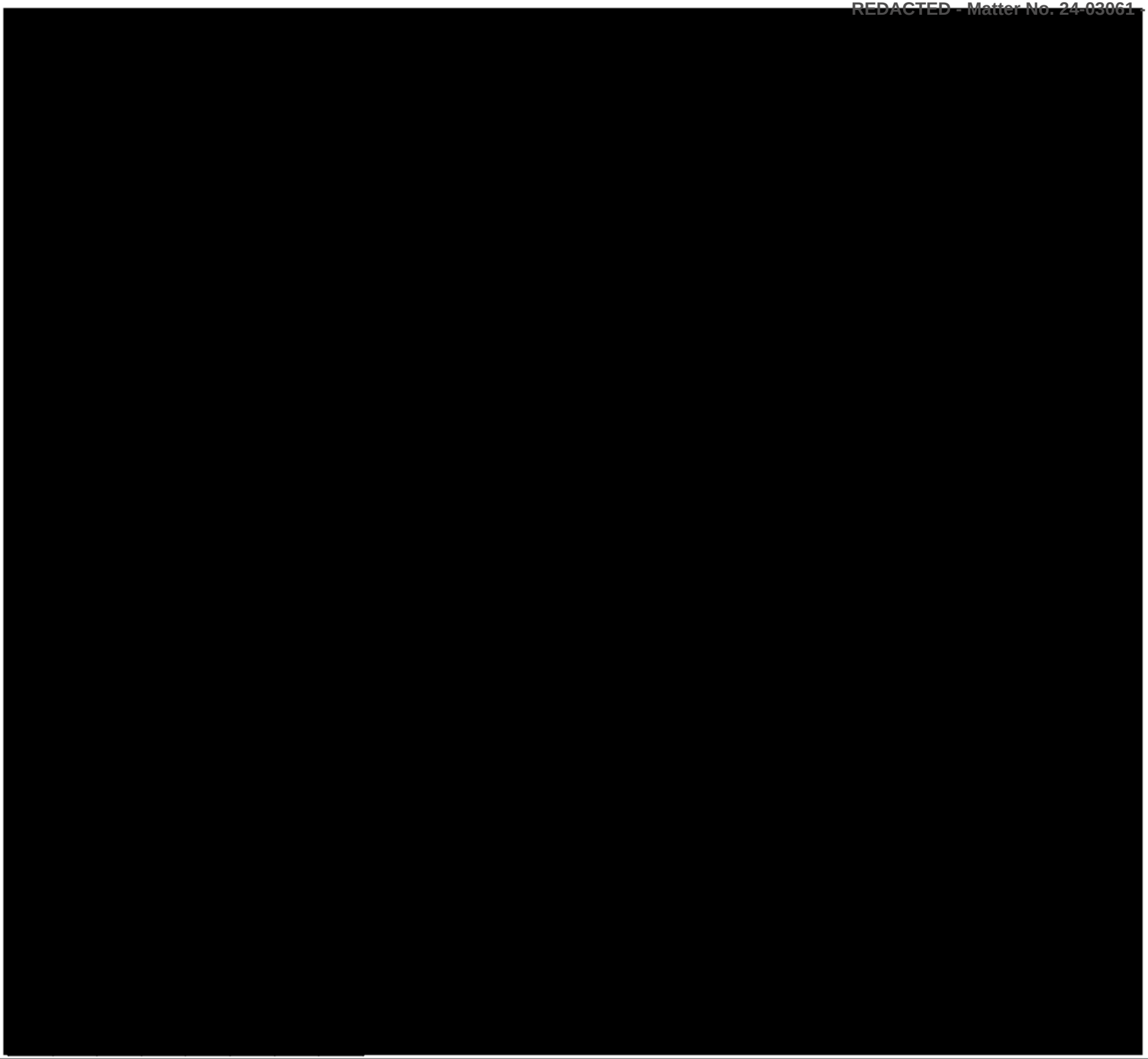
FIGURES



Grass River Solar Project
St. Lawrence County, NY

Project Area

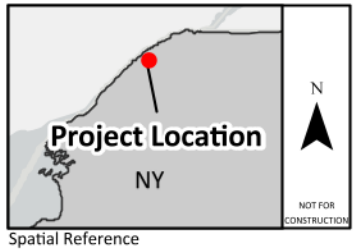
LEGEND

Project Area

Data Sources:
USA Topographic Map

Prepared by: TETRA TECH

Prepared for: CSEnergy



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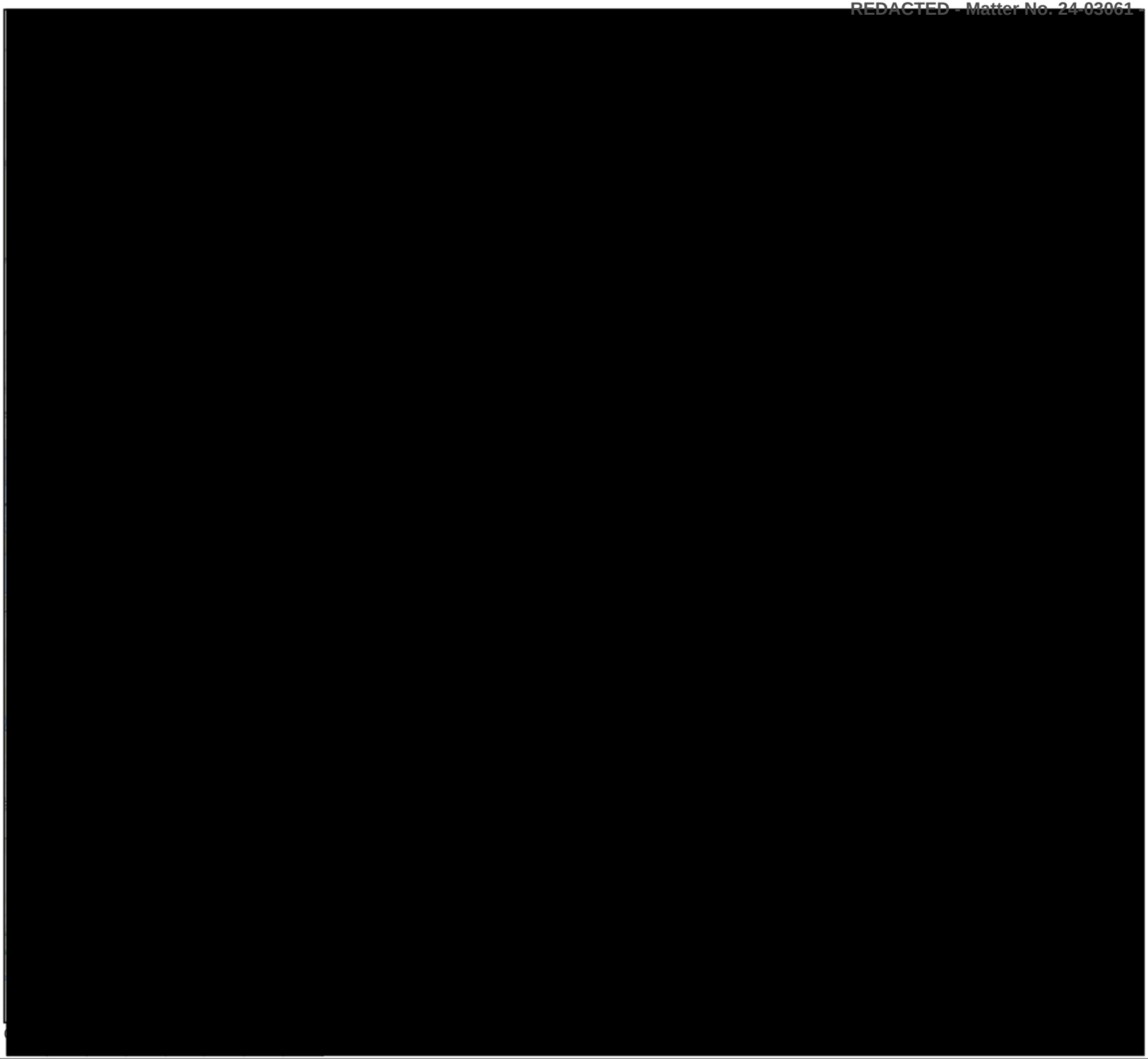


Grass River Solar Project
St. Lawrence County, NY

Study Area Location

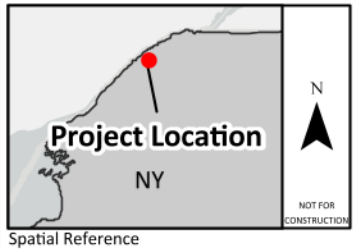
LEGEND

- Study Area
- Project Area

Data Sources:
USGS National Map

Prepared by: TETRA TECH

Prepared for: CSEnergy



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Grass River Solar Project
St. Lawrence County, NY

NYNHP Significant Natural Communities

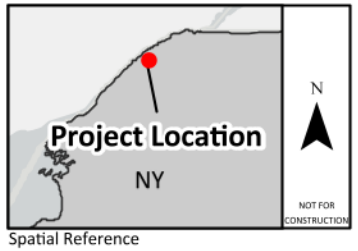
LEGEND

- Study Area
- Project Area
- NYNHP Significant Natural Communities

Data Sources:
ESRI Imagery Basemap, NYNHP 2022

Prepared by: TETRA TECH

Prepared for: CSEnergy



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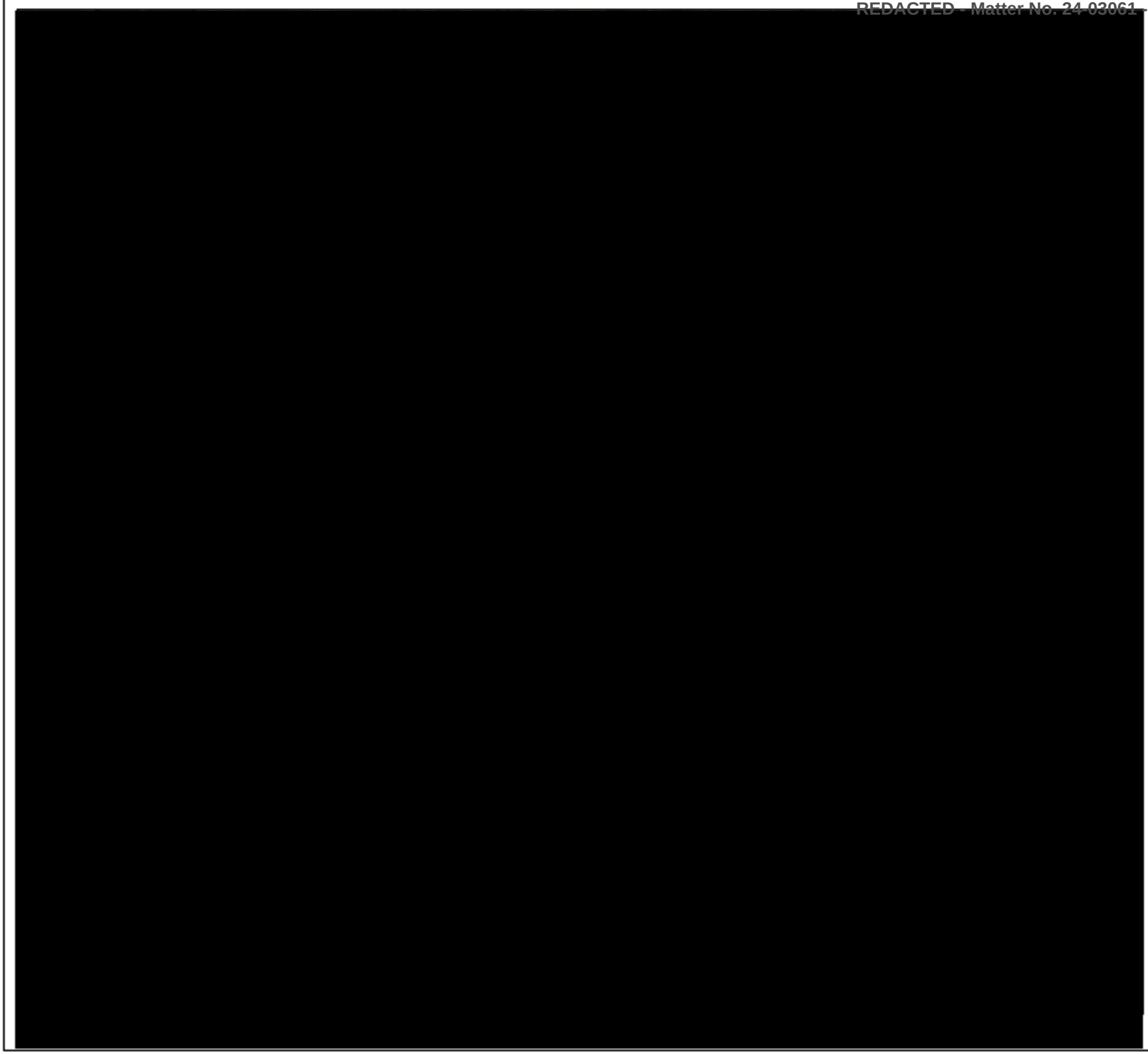


Grass River Solar Project
St. Lawrence County, NY

NLCD Land Cover Classes

LEGEND

- Project Area

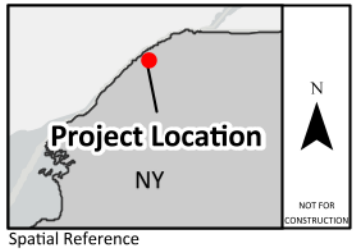
NLCD Land Cover Class

- Developed, Open Space
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Shrub/Scrub
- Herbaceous
- Hay/Pasture
- Cultivated Crops
- Woody Wetlands
- Emergent Herbaceous Wetlands

Data Sources:
ESRI Imagery Basemap, NLCD 2021

Prepared by: TETRA TECH

Prepared for: CSEnergy



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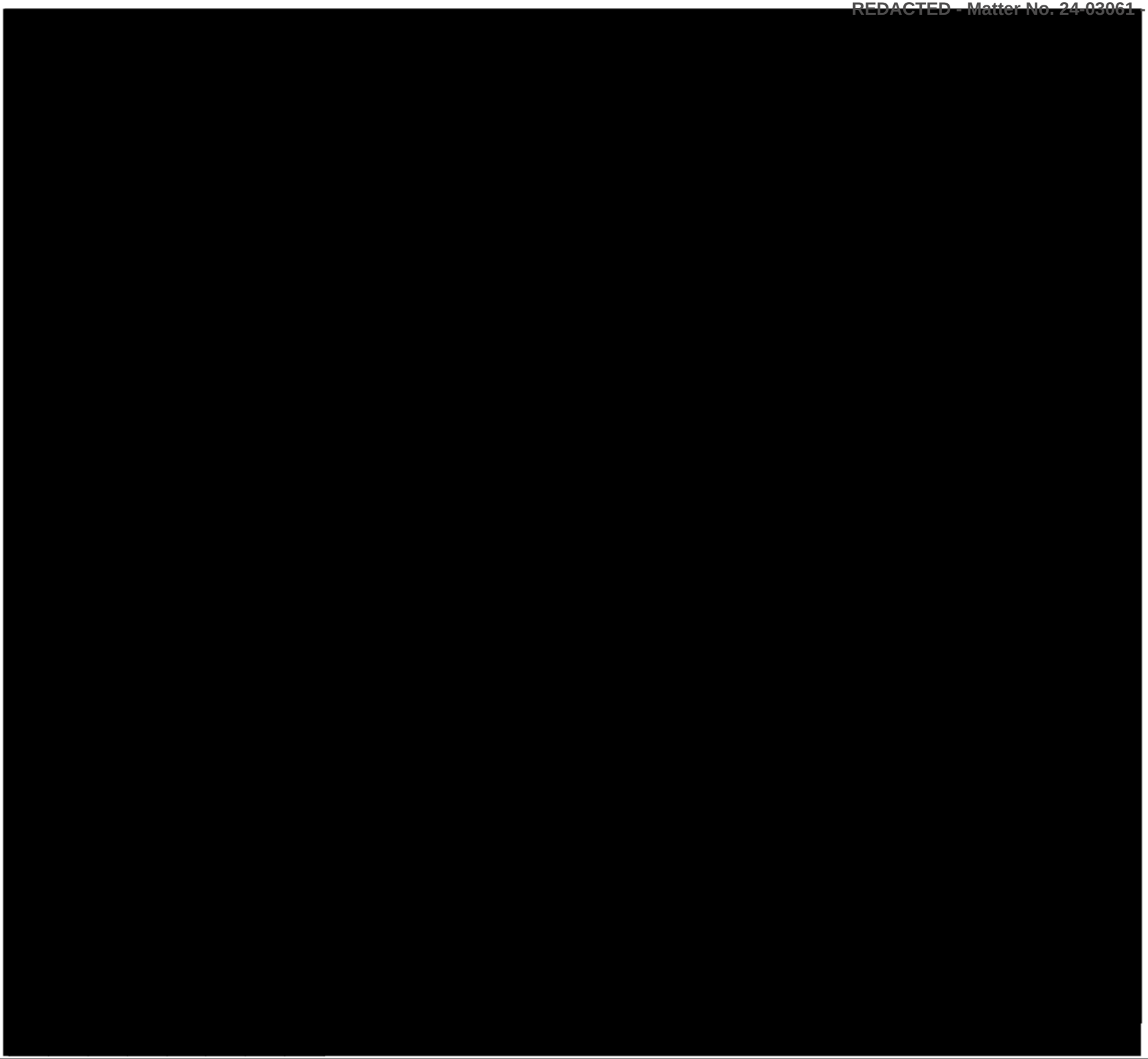


Grass River Solar Project
St. Lawrence County, NY

Mapped Wetlands and Waterbodies

LEGEND

- Study Area
- Project Area
- NYSDEC Wetlands
- NHD Flowlines

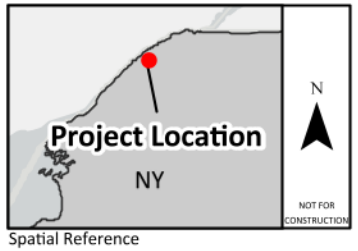
NWI Wetlands

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

Data Sources:
ESRI Imagery Basemap, NYSDEC, USFWS NWI, USGS NHD

Prepared by: TETRA TECH

Prepared for: CSEnergy



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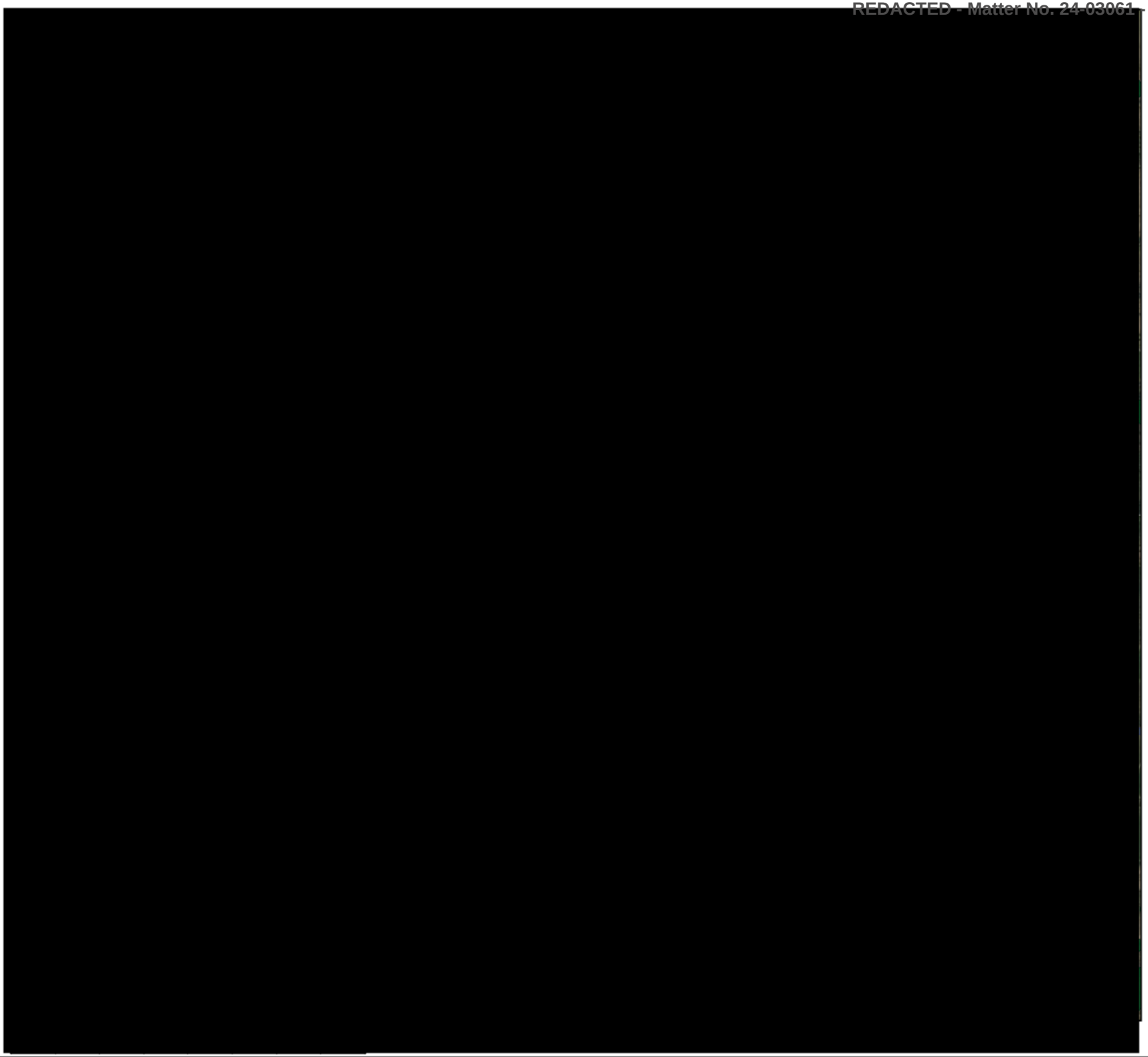


Grass River Solar Project
St. Lawrence County, NY

NWI Wetlands and Waterbodies

LEGEND

- Project Area

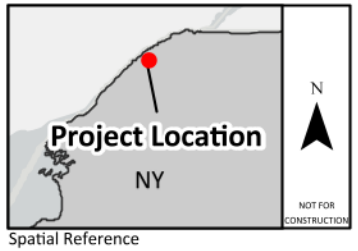
NWI Wetlands

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

Data Sources:
ESRI Imagery Basemap, USFWS NWI

Prepared by: TETRA TECH

Prepared for: CSEnergy



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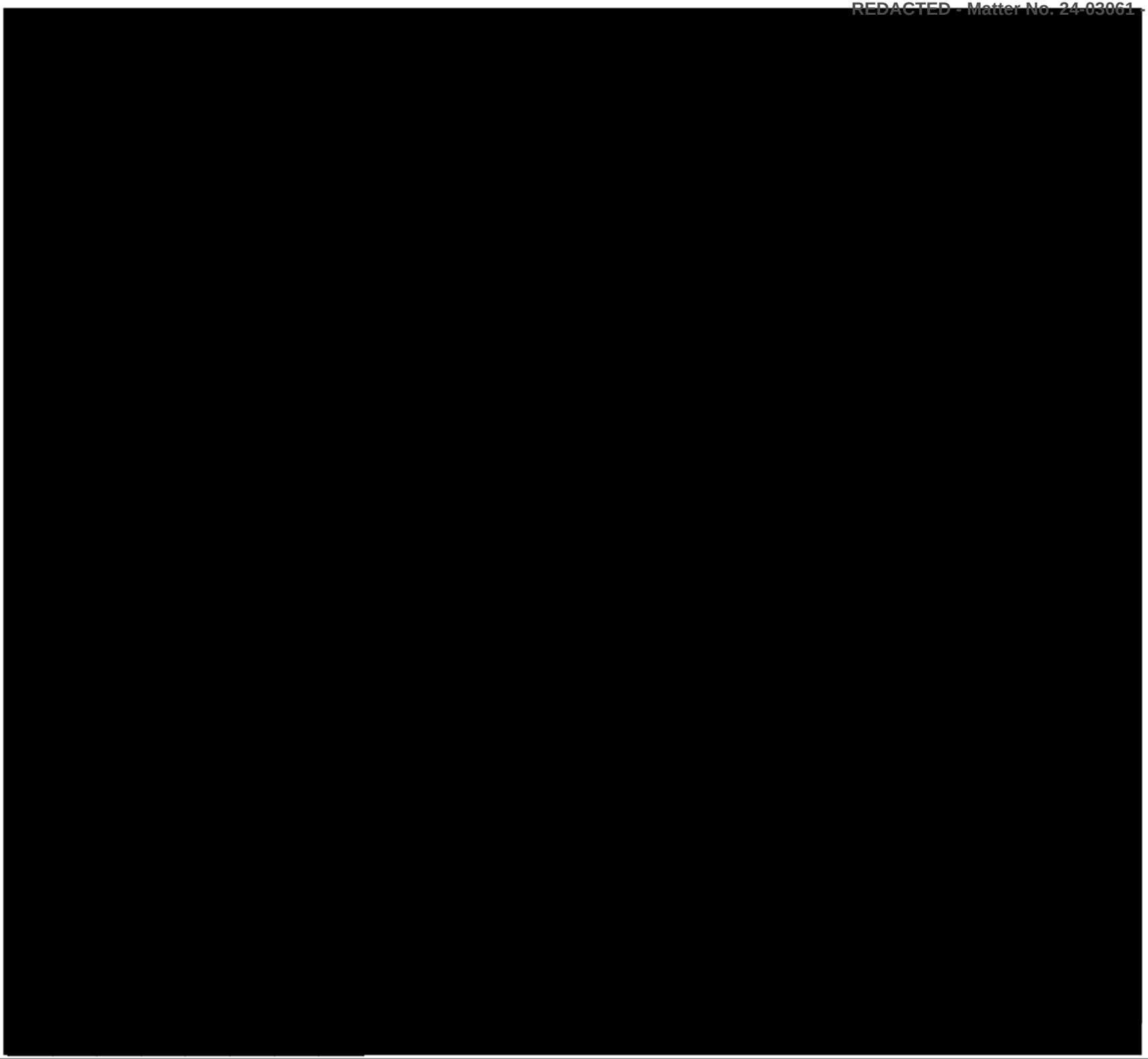


Grass River Solar Project
St. Lawrence County, NY

NHD Mapped Streams

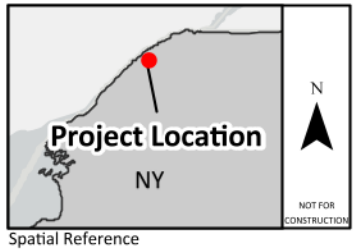
LEGEND

- Project Area
- NHD Streams

Data Sources:
ESRI Imagery Basemap, USGS NHD

Prepared by: TETRA TECH

Prepared for: CSEnergy



Spatial Reference
WGS 1984 UTM Zone 18N

Grass River Solar Project
St. Lawrence County, NY

NYSDEC Mapped Wetlands

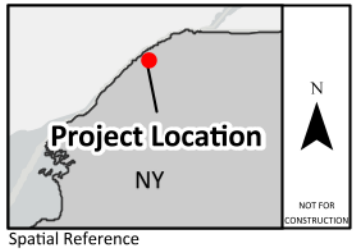
LEGEND

- Project Area
- NYSDEC Wetlands

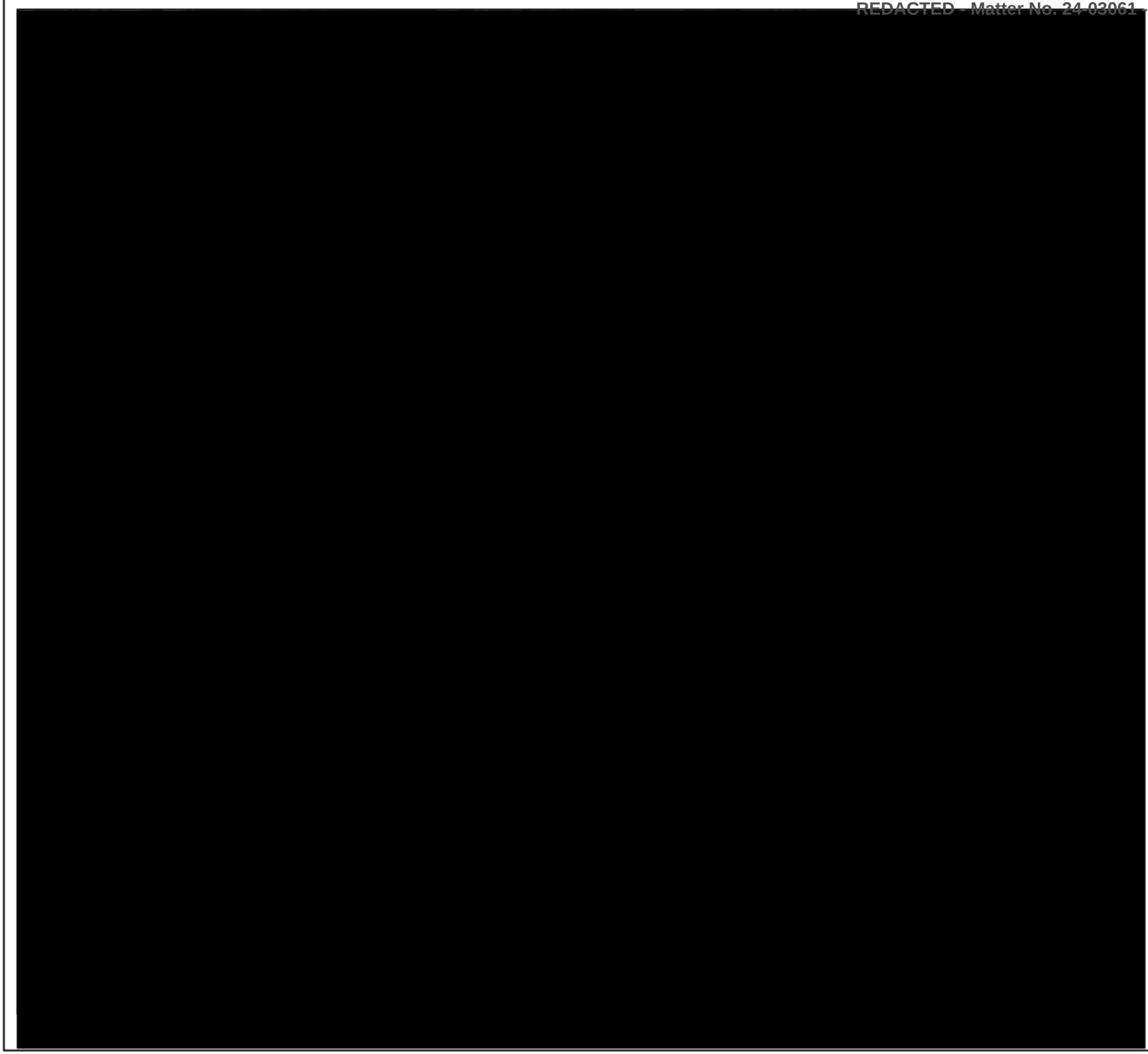
Data Sources:
ESRI Imagery Basemap, NYSDEC

Prepared by: TETRA TECH

Prepared for: CSEnergy



Spatial Reference
WGS 1984 UTM Zone 18N



Grass River Solar Project
St. Lawrence County, NY

PAD-US Lands in the Study Area

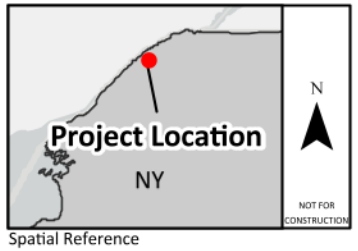
LEGEND

- Study Area
- Project Area
- PAD-US Lands

Data Sources:
ESRI Imagery Basemap, USGS PAD-US

Prepared by: TETRA TECH

Prepared for: CSEnergy



Spatial Reference
WGS 1984 UTM Zone 18N

Grass River Solar Project
St. Lawrence County, NY

PAD-US Lands in the Project Area

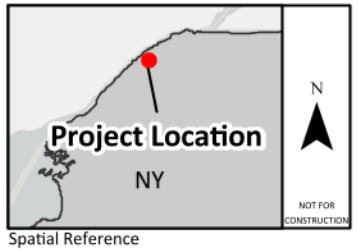
LEGEND

- Project Area
- PAD-US Lands

Data Sources:
ESRI Imagery Basemap, USGS PAD-US

Prepared by: TETRA TECH

Prepared for: CSEnergy



Spatial Reference
WGS 1984 UTM Zone 18N

ATTACHMENTS

ATTACHMENT A
NYNHP Letter

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

August 26, 2024

Greg Lawrence
Tetra Tech, Inc.
3136 South Winton Road, Suite 303
Rochester, NY 14623

Re: Grass River Solar
County: St Lawrence Town/City: Madrid, Waddington

Dear Greg Lawrence:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 6 Office, Division of Environmental Permits, at dep.r6@dec.ny.gov.

Sincerely,

Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program

New York Natural Heritage Program Report on State-listed Animals

The following state-listed animals have been documented in the vicinity of the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed.

For information about any permit considerations for the project, contact the NYSDEC Region 6 Office, Division of Environmental Permits, at dep.r6@dec.ny.gov, (315) 785-2245.

The following species has been documented in the vicinity of the project site.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*
Reptiles			
[redacted]			10631

This report only includes records from the NY Natural Heritage database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

New York Natural Heritage Program

Report on Rare Animals, Rare Plants, and Significant Natural Communities

The following rare plants, rare animals, and significant natural communities have been documented at the project site, or in its vicinity.

We recommend that potential impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program, and are a vulnerable natural resource of conservation concern.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*

Vascular Plants

[redacted]

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org.

ATTACHMENT B1
IPaC Letter

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: 01/24/2025 14:54:36 UTC
Project Code: 2025-0046710
Project Name: Grass River Solar 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:

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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.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/program/migratory-bird-permit/what-we-do.

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/library/collections/threats-birds.

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/partner/council-conservation-migratory-birds.

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: 2025-0046710
Project Name: Grass River Solar Project
Project Type: Power Gen - Solar
Project Description: A proposed 80 MW AC renewable energy development project.
Project Location:

Counties: St. Lawrence County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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]

INSECTS

NAME STATUS

[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: Private Entity
Name: Josh Collette
Address: 3136 S Winton Rd
Address Line 2: Ste 303
City: Rochester
State: NY
Zip: 14623
Email josh.collette@tetratech.com
Phone: 3152365807

ATTACHMENT B2
ECOS Database Search Results

IPaC resource list

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

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

Location

St. Lawrence County, New York

Local office

New York Ecological Services Field Office

(607) 753-9334
(607) 753-9699
fw5es_nyfo@fws.gov

3817 Luker Road
Cortland, NY 13045-9385

Endangered species

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

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

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

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

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

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

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

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

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

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

Mammals

NAME	STATUS
[redacted]	

Insects

NAME	STATUS
[redacted]	

Critical habitats

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

There are no critical habitats at this location.

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

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

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

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental

Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
Golden Eagle Aquila chrysaetos 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/1680	Breeds Jan 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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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

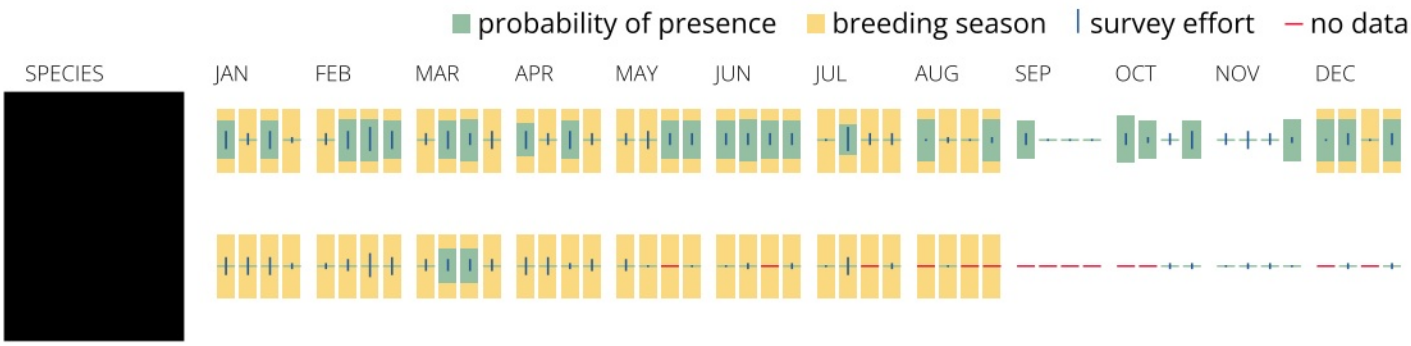
Breeding Season ( )
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

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

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 line or no data line (red horizontal) 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 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 and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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.

Interpreting the Probability of Presence Graphs

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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

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

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.

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.

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.

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.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds

at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
Belted Kingfisher Megaceryle alcyon This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 15 to Jul 25
Black-billed Cuckoo Coccyzus erythropthalmus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink Dolichonyx oryzivorus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Chimney Swift Chaetura pelagica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25

Eastern Meadowlark Sturnella magna This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 31
Evening Grosbeak Coccothraustes vespertinus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
Golden Eagle Aquila chrysaetos 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/1680	Breeds Jan 1 to Aug 31
Lesser Yellowlegs Tringa flavipes This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper Calidris melanotos This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Rose-breasted Grosbeak Pheucticus ludovicianus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 15 to Jul 31
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Wood Thrush Hylocichla mustelina This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 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

"Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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

Breeding Season (■)

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

Survey Effort (|)

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

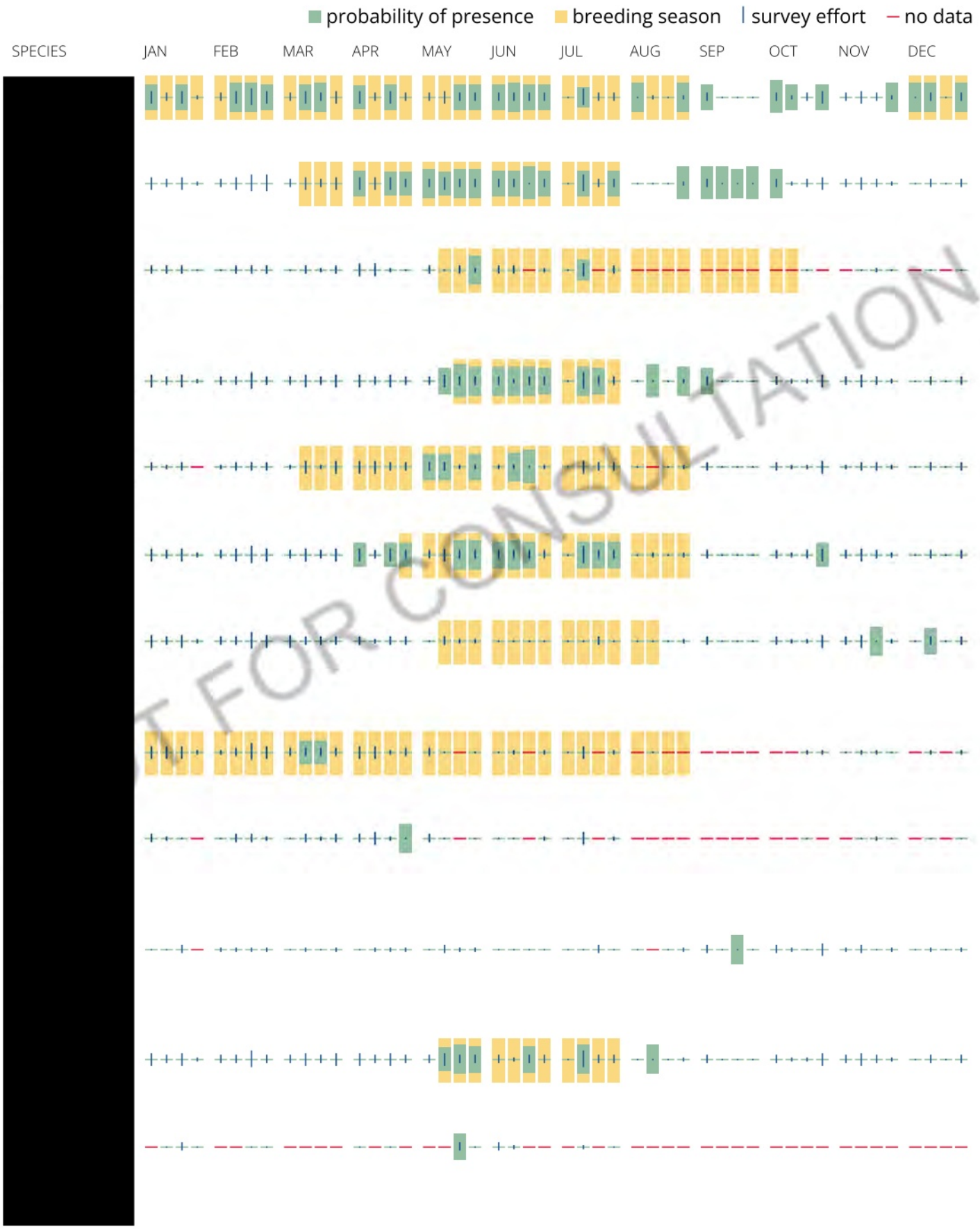
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

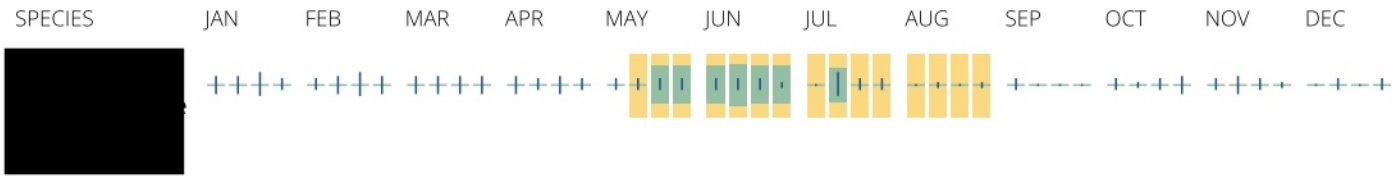
No Data (–)

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

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

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

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

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

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

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) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection 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, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

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

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

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

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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 Bald and Golden Eagle Protection 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 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 BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

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.

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 look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 does not represent all birds present in your project area. 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 and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

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

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.

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.

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.

Facilities

National Wildlife Refuge lands

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

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM5E
- PEM5C

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1E
- PFO1C
- PSS1E
- PSS1F
- PSS1C

FRESHWATER POND

- PUBHx

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

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

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

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

Data exclusions

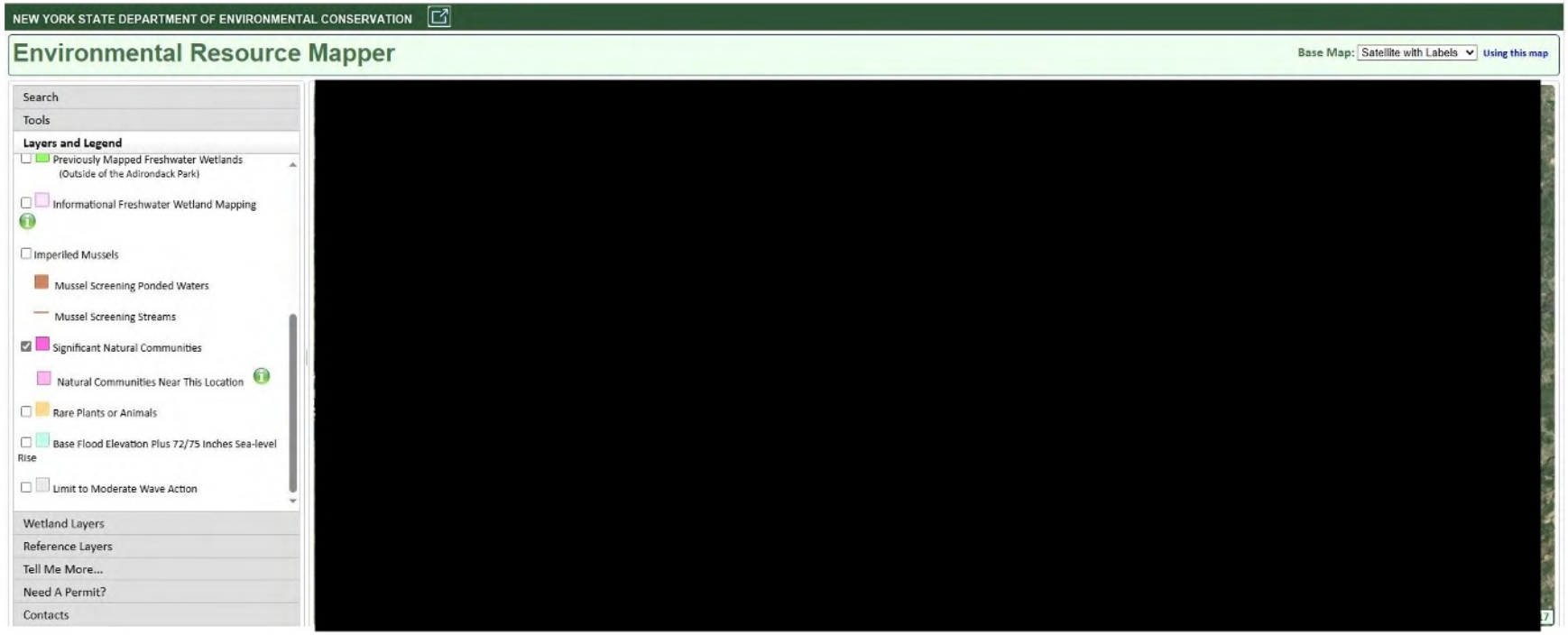
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and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

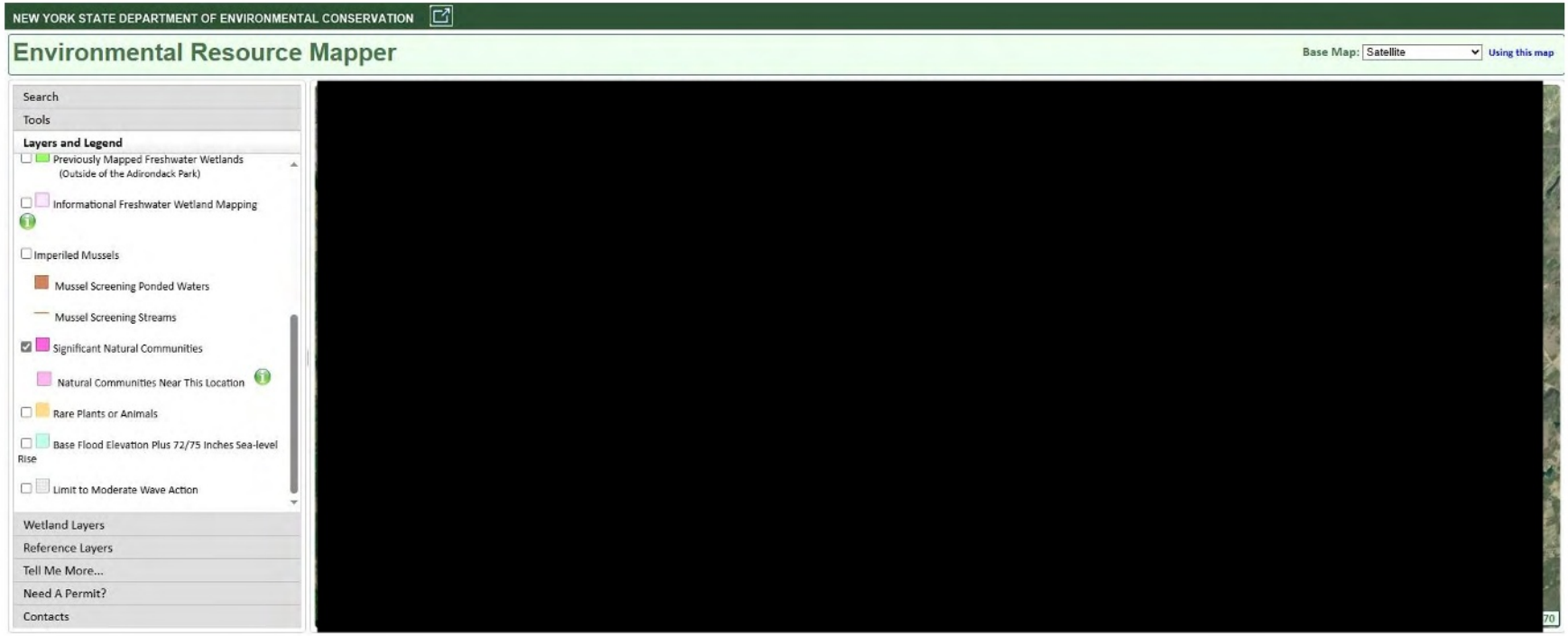
Data precautions

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

seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

ATTACHMENT C
NYSDEC ERM Results


NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Environmental Resource Mapper
Base Map: Satellite with Labels
Using this map
Search
Tools
Layers and Legend
Previously Mapped Freshwater Wetlands (Outside of the Adirondack Park)
Informational Freshwater Wetland Mapping
Imperiled Mussels
Mussel Screening Ponded Waters
Mussel Screening Streams
Significant Natural Communities
Natural Communities Near This Location
Rare Plants or Animals
Base Flood Elevation Plus 72/75 Inches Sea-level Rise
Limit to Moderate Wave Action
Wetland Layers
Reference Layers
Tell Me More...
Need A Permit?
Contacts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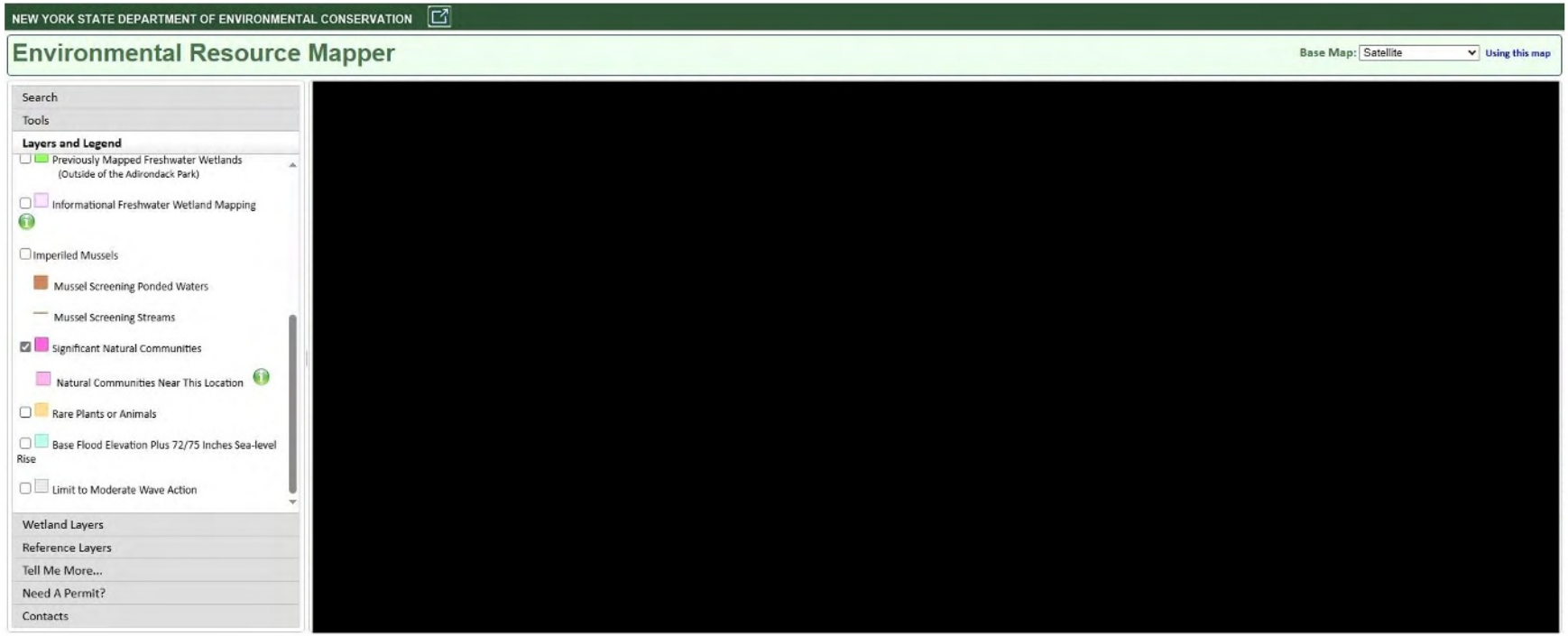
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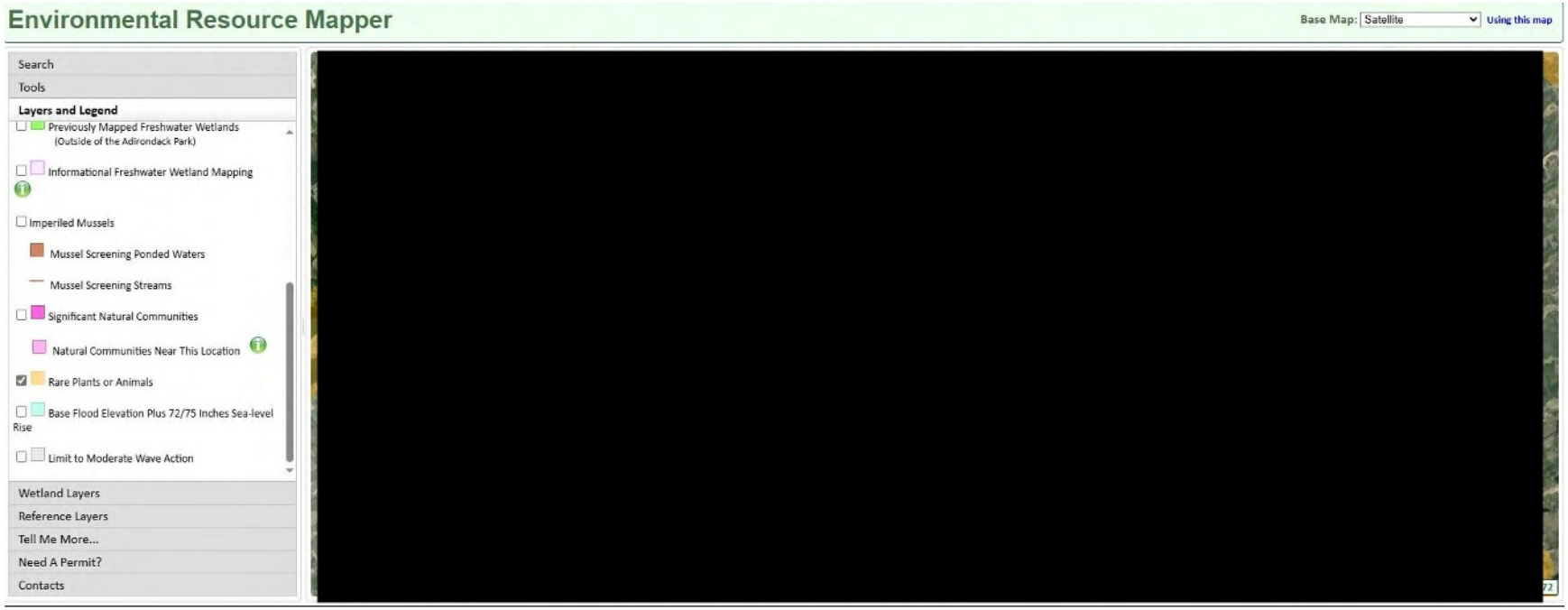
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Contacts

ATTACHMENT D
NYSDEC EAF Mapper Results

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information		
Name of Action or Project:		
Project Location (describe, and attach a location map):		
Brief Description of Proposed Action:		
Name of Applicant or Sponsor:	Telephone: E-Mail:	
Address:		
City/PO: q	State:	Zip Code:

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☐	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:	NO ☐	YES ☐

3. a. Total acreage of the site of the proposed action? _____ acres
   b. Total acreage to be physically disturbed? _____ acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☐	☐
b. Consistent with the adopted comprehensive plan?	☐	☐	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☐

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☐	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☐

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☐

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____ _____	☐	☐

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____ _____	☐	☐

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☐	☑

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐Shoreline ☐ Forest Agricultural/grasslands Early mid-successional

Wetland ☐ Urban Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? [redacted]	☐	☐
16. Is the project site located in the 100-year flood plan?	☐	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☐
If Yes,		
a. Will storm water discharges flow to adjacent properties?	☐	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☐
If Yes, briefly describe: _____ _____		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: _____ _____	☐	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	☐	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	☐	☐

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: _____ Date: _____

Signature: _____ Title: _____

EAF Mapper Summary Report

[redacted]

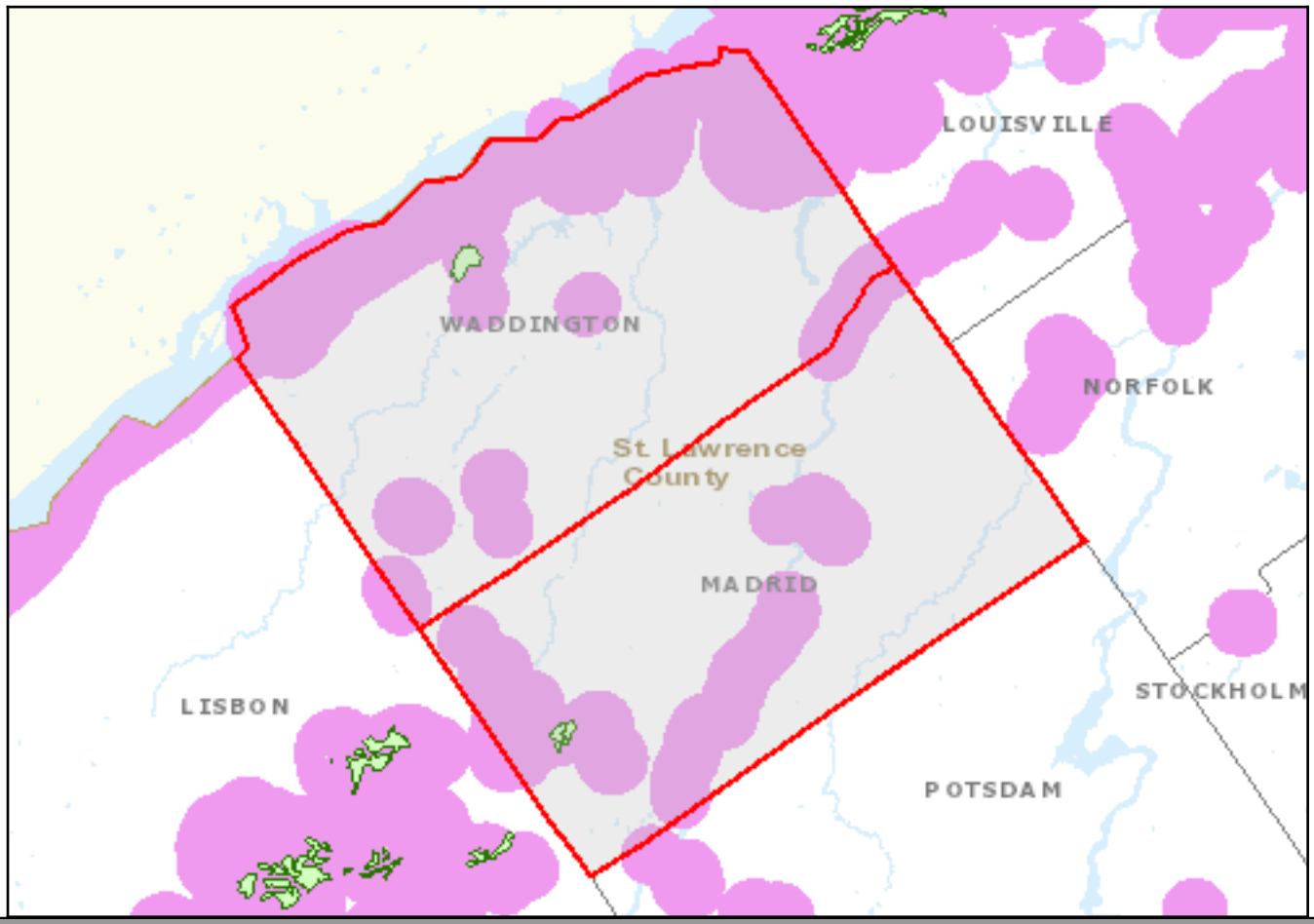
Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	[redacted]
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	No

ATTACHMENT E
NYSDEC Nature Explorer Results

New York Nature Explorer
Town Results Report

Criteria: Town: Madrid, Waddington



Common Name	Subgroup	Distribution Status	Year Last Documente	Protection Status		Conservation Rank	
				State	Federal	State	Global
Town: Madrid							
Animal: Fish							
Blacknose Shiner *Notropis heterolepis*	Minnows, Shiners, Suckers	Recently Confirmed	2015			S2S3	G5
Bridle Shiner *Notropis bifrenatus*	Minnows, Shiners, Suckers	Recently Confirmed	2015			S2?	G3
Animal: Mussels and Clams							
Black Sandshell *Ligumia recta*	Freshwater Mussels	Recently Confirmed	1995			S2	G4G5

New York Nature Explorer

Common Name	Subgroup	Distribution Status	Year Last Documente	Protection Status		Conservation Rank	
				State	Federal	State	Global
Eastern Pearlshell *Margaritifera margaritifera*	Freshwater Mussels	Recently Confirmed	1995			S2S3	G4
Yellow Lampmussel *Lampsilis cariosa*	Freshwater Mussels	Recently Confirmed	1995			S2S3	G3G4

Plant: Flowering Plants

Lindley's Aster *Symphyotrichum ciliolatum*	Asters, Goldenrods and Daisies	Recently Confirmed	2009	Endangered		S1	G5
New England Northern Reed Grass *Calamagrostis stricta ssp. inexpansa*	Grasses	Possible but not Confirmed	1987	Threatened		S2	G5T5
Northern Bog Aster *Symphyotrichum boreale*	Asters, Goldenrods and Daisies	Recently Confirmed	2005	Threatened		S2	G5
Pink Shinleaf *Pyrola asarifolia ssp. asarifolia*	Other Flowering Plants	Recently Confirmed	2007	Threatened		S2S3	G5T5
Riverweed *Podostemum ceratophyllum*	Other Flowering Plants	Recently Confirmed	2005	Threatened		S2S3	G5
Sartwell's Sedge *Carex sartwellii*	Sedges	Recently Confirmed	2005	Endangered		S1S2	G5
Small Bur-reed *Sparganium natans*	Other Flowering Plants	Recently Confirmed	2005	Threatened		S2	G5
Sparse-flowered Sedge *Carex tenuiflora*	Sedges	Recently Confirmed	2005	Endangered		S1S2	G5
Swamp Birch *Betula pumila*	Other Flowering Plants	Recently Confirmed	2005	Threatened		S2	G5

Natural Community: Freshwater Nontidal Wetlands

Red Maple-Tamarack Peat Swamp *Red maple-tamarack peat swamp*	Forested Peatlands	Recently Confirmed	1996			S2S3	G3G4
Rich Shrub Fen *Rich shrub fen*	Open Peatlands	Recently Confirmed	1999			S1S2	G3G4

Town: Waddington

New York Nature Explorer

Common Name	Subgroup	Distribution Status	Year Last Documente	Protection Status		Conservation Rank	
				State	Federal	State	Global
Animal: Birds							
Common Loon *Gavia immer*	Loons	Recently Confirmed	2002	Special Concern		S4	G5
Animal: Fish							
Blackchin Shiner *Notropis heterodon*	Minnows, Shiners, Suckers	Recently Confirmed	2017			S2	G5
Blacknose Shiner *Notropis heterolepis*	Minnows, Shiners, Suckers	Recently Confirmed	2010			S2S3	G5
Bridle Shiner *Notropis bifrenatus*	Minnows, Shiners, Suckers	Recently Confirmed	2008			S2?	G3
Iowa Darter *Etheostoma exile*	Darters and Sunfishes	Historically Confirmed	1981			S2	G5
Animal: Mussels and Clams							
Black Sandshell *Ligumia recta*	Freshwater Mussels	Recently Confirmed	1995			S2	G4G5
Eastern Pearlshell *Margaritifera margaritifera*	Freshwater Mussels	Recently Confirmed	1995			S2S3	G4
Yellow Lampmussel *Lampsilis cariosa*	Freshwater Mussels	Historically Confirmed	1991			S2S3	G3G4
Plant: Flowering Plants							
American Dragonhead *Dracocephalum parviflorum*	Other Flowering Plants	Historically Confirmed	1889	Endangered		S1	G5
Autumn Water Starwort *Callitriche hermaphroditica*	Other Flowering Plants	Extirpated	1935	Endangered		S1	G5
Crawe's Sedge *Carex crawei*	Sedges	Recently Confirmed	2006	Threatened		S2	G5
Lake Water Cress *Rorippa aquatica*	Other Flowering Plants	Extirpated	1930	Threatened		S2	G4?
Lindley's Aster *Symphyotrichum ciliolatum*	Asters, Goldenrods and Daisies	Recently Confirmed	2005	Endangered		S1	G5

New York Nature Explorer

Common Name	Subgroup	Distribution Status	Year Last Documente	Protection Status		Conservation Rank	
				State	Federal	State	Global
Many-headed Sedge *Carex sychnocephala*	Sedges	Extirpated	1935	Endangered		SH	G5
Pink Shinleaf *Pyrola asarifolia ssp. asarifolia*	Other Flowering Plants	Recently Confirmed	2019	Threatened		S2S3	G5T5
Riverweed *Podostemum ceratophyllum*	Other Flowering Plants	Recently Confirmed	2005	Threatened		S2S3	G5
Sartwell's Sedge *Carex sartwellii*	Sedges	Recently Confirmed	2008	Endangered		S1S2	G5
Slender Bulrush *Schoenoplectus heterochaetus*	Sedges	Recently Confirmed	2014	Endangered		S2	G5
Small Bur-reed *Sparganium natans*	Other Flowering Plants	Historically Confirmed	1988	Threatened		S2	G5
Swamp Birch *Betula pumila*	Other Flowering Plants	Recently Confirmed	2005	Threatened		S2	G5
Thread-leaved Pondweed *Stuckenia filiformis*	Other Flowering Plants	Historically Confirmed	1930	Endangered		S1	G5
Wiry Witch Grass *Panicum flexile*	Grasses	Recently Confirmed	2005	Rare		S3	G5

Plant: Ferns and Fern Allies

Marsh Horsetail *Equisetum palustre*	Horsetails	Recently Confirmed	2016	Threatened		S2	G5
Meadow Horsetail *Equisetum pratense*	Horsetails	Recently Confirmed	2005	Threatened		S2	G5
Northern Firmoss *Huperzia selago*	Clubmosses	Recently Confirmed	2009	Endangered		S1	G5

Natural Community: Uplands

Calcareous Pavement Woodland *Calcareous pavement woodland*	Barrens and Woodlands	Recently Confirmed	1995			S2S3	G3G4

New York Nature Explorer

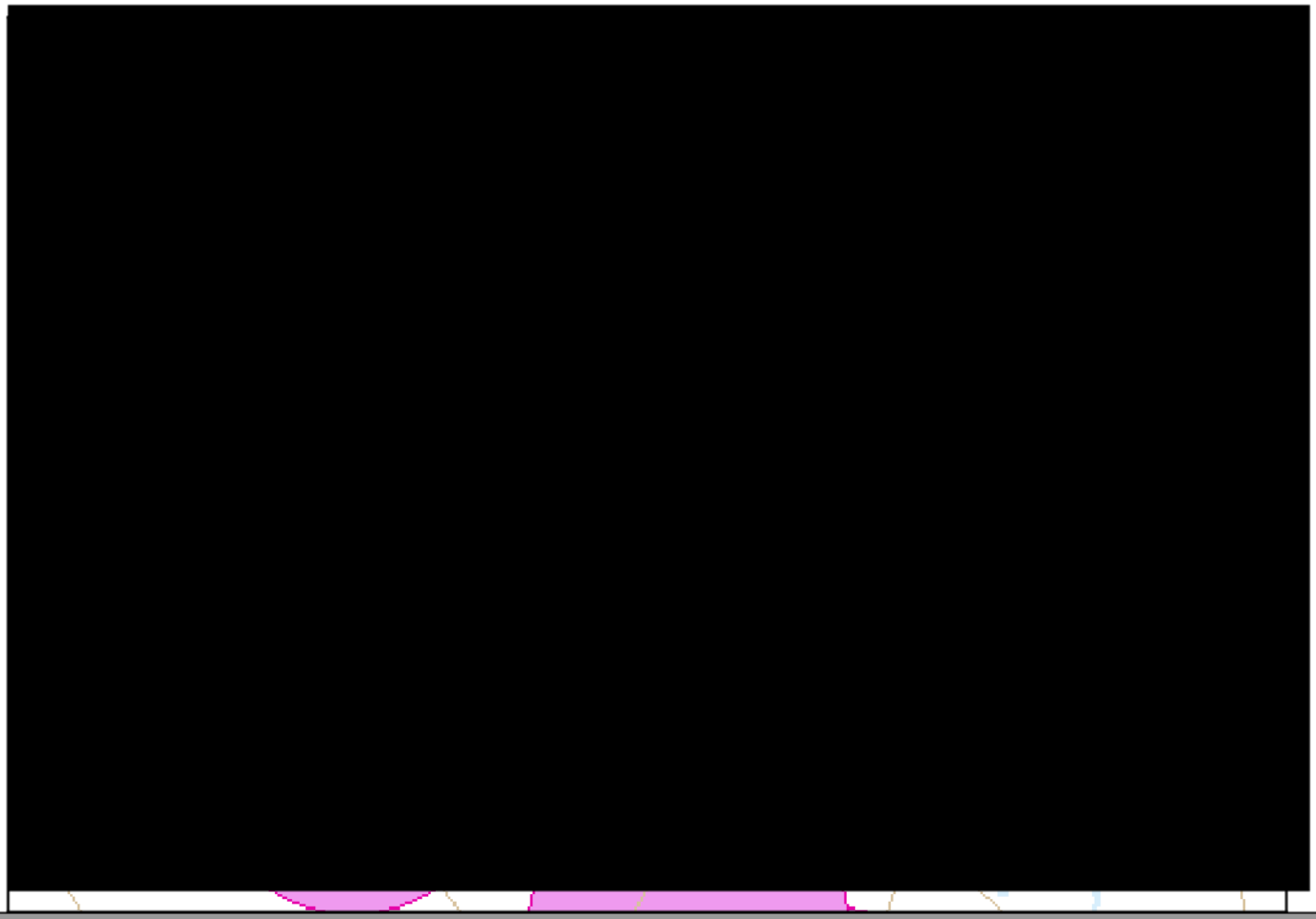
Common Name	Subgroup	Distribution Status	Year Last Documente	Protection Status		Conservation Rank	
				State	Federal	State	Global

Note: Restricted plants and animals may also have also been documented in one or more of these Towns or Cities, but are not listed in these results. This application does not provide information at the level of Town or City on state-listed animals and on other sensitive animals and plants. A list of the restricted animals and plants documented in the corresponding county (or counties) can be obtained via the County link(s) on the original Town Search Results page. Any individual plant or animal on this county's restricted list may or may not occur in this particular Town or City.

This list only includes records of rare species and significant natural communities from the databases of the NY Natural Heritage Program. This list is not a definitive statement about the presence or absence of all plants and animals, including rare or state-listed species, or of all significant natural communities. For most areas, comprehensive field surveys have not been conducted, and this list should not be considered a substitute for on-site surveys.

New York Nature Explorer
User Defined Results Report

Criteria: Selected Map Area



Plant: Flowering Plants

Common Name	Subgroup	Distribution Status	Year Last Documente	Protection Status		Conservation Rank	
				State	Federal	State	Global
Crawe's Sedge *Carex crawei*	Sedges	Recently Confirmed	2006	Threatened		S2	G5
Lindley's Aster *Symphyotrichum ciliolatum*	Asters, Goldenrods and Daisies	Recently Confirmed	2005	Endangered		S1	G5
Pink Shinleaf *Pyrola asarifolia ssp. asarifolia*	Other Flowering Plants	Recently Confirmed	2007	Threatened		S2S3	G5T5
Small Bur-reed *Sparganium natans*	Other Flowering Plants	Recently Confirmed	2005	Threatened		S2	G5

New York Nature Explorer

Common Name	Subgroup	Distribution Status	Year Last Documente	Protection Status		Conservation Rank	
				State	Federal	State	Global

Note: Restricted plants and animals may also have also been documented in one or more of the Towns or Cities in which your user-defined area is located, but are not listed in these results. This application does not provide information at the level of Town or City on state-listed animals and on other sensitive animals and plants. A list of the restricted animals and plants documented at the corresponding county level can be obtained via the County link(s) on the original User Defined Search Results page. Any individual plant or animal on this county's restricted list may or may not occur in this particular user-defined area.

This list only includes records of rare species and significant natural communities from the databases of the NY Natural Heritage Program. This list is not a definitive statement about the presence or absence of all plants and animals, including rare or state-listed species, or of all significant natural communities. For most areas, comprehensive field surveys have not been conducted, and this list should not be considered a substitute for on-site surveys.

ATTACHMENT F
eBird Results

Attachment F. Cornell University eBird Data from 2020-2025 for Study Area

All Taxa		Subset of T&E Species	
Taxon	# of Unique Obs	Taxon	# of Unique Obs
Alder Flycatcher	36	American Bittern	21
Alder/Willow Flycatcher (Traill's Flycatcher)	3	American Black Duck	24
American Bittern	21	Bald Eagle	67
American Black Duck	24	Bobolink	40
American Crow	236	Brown Thrasher	25
American Goldfinch	177	Common Loon	11
American Herring Gull	42	Common Tern	26
American Kestrel	47	Cooper's Hawk	7
American Pipit	2	Eastern Meadowlark	72
American Redstart	46	Golden-winged Warbler	1
American Robin	257	Golden Eagle	1
American Tree Sparrow	25	Grasshopper Sparrow	7
American Wigeon	1	Horned Lark	20
American Woodcock	14	Least Bittern	12
Bald Eagle	67	Northern Harrier	42
Baltimore Oriole	33	Osprey	47
Bank Swallow	11	Peregrine Falcon	4
Barn Swallow	77	Pied-billed Grebe	8
Barred Owl	12	Red-shouldered Hawk	6
Belted Kingfisher	31	Rusty Blackbird	12
bird sp.	2	Sedge Wren	2
Black-and-white Warbler	23	Sharp-shinned Hawk	7
Black-billed Cuckoo	4	Upland Sandpiper	1
Black-capped Chickadee	205	Vesper Sparrow	3
Black-crowned Night Heron	11		
Black-throated Green Warbler	5		
blackbird sp.	3		
Blackburnian Warbler	1		

All Taxa		Subset of T&E Species	
Taxon	# of Unique Obs	Taxon	# of Unique Obs
Blackpoll Warbler	1		
Blue-gray Gnatcatcher	1		
Blue-headed Vireo	3		
Blue-winged Teal	3		
Blue-winged Warbler	1		
Blue Jay	201		
Bobolink	40		
Bohemian Waxwing	4		
Bonaparte's Gull	1		
Broad-winged Hawk	5		
Brown-headed Cowbird	40		
Brown Creeper	5		
Brown Thrasher	25		
Bufflehead	12		
Buteo sp.	1		
Cackling Goose	1		
Cackling/Canada Goose	2		
Canada Goose	197		
Carolina Wren	2		
Caspian Tern	5		
Cedar Waxwing	61		
Chestnut-sided Warbler	29		
Chimney Swift	2		
Chipping Sparrow	60		
Cliff Swallow	5		
Common Gallinule	8		
Common Goldeneye	52		
Common Grackle	144		
Common Loon	11		
Common Merganser	99		

All Taxa		Subset of T&E Species	
Taxon	# of Unique Obs	Taxon	# of Unique Obs
Common Raven	69		
Common Tern	26		
Common Yellowthroat	119		
Cooper's Hawk	7		
crow sp.	1		
Dark-eyed Junco	68		
Double-crested Cormorant	46		
Downy Woodpecker	68		
Downy/Hairy Woodpecker	6		
duck sp.	6		
Eastern Bluebird	13		
Eastern Kingbird	74		
Eastern Meadowlark	72		
Eastern Phoebe	37		
Eastern Towhee	33		
Eastern Wood-Pewee	44		
European Starling	187		
Field Sparrow	5		
Gadwall	6		
Golden-crowned Kinglet	7		
Golden-winged Warbler	1		
Golden-winged/Blue-winged Warbler	1		
Golden Eagle	1		
Grasshopper Sparrow	7		
Gray Catbird	83		
Great Black-backed Gull	8		
Great Blue Heron	53		
Great Crested Flycatcher	37		
Great Egret	26		
Great Horned Owl	1		

All Taxa		Subset of T&E Species	
Taxon	# of Unique Obs	Taxon	# of Unique Obs
Greater Scaup	4		
Greater Yellowlegs	2		
Green-winged Teal	6		
Green Heron	14		
gull sp.	3		
Hairy Woodpecker	86		
hawk sp.	1		
Hermit Thrush	8		
Hooded Merganser	22		
Horned Lark	20		
House Finch	4		
House Sparrow	72		
Indigo Bunting	24		
Killdeer	36		
Larus sp.	4		
Least Bittern	12		
Least Flycatcher	16		
Lesser Scaup	1		
Lesser Yellowlegs	4		
Lincoln's Sparrow	1		
Magnolia Warbler	1		
Mallard	111		
Mallard x American Black Duck (hybrid)	1		
Marsh Wren	29		
Merlin	5		
Mourning Dove	115		
Mute Swan	5		
Nashville Warbler	8		
new world warbler sp.	3		
Northern Cardinal	151		

All Taxa		Subset of T&E Species	
Taxon	# of Unique Obs	Taxon	# of Unique Obs
Northern Flicker	86		
Northern Harrier	42		
Northern House Wren	63		
Northern Parula	4		
Northern Pintail	1		
Northern Rough-winged Swallow	13		
Northern Shrike	5		
Northern Waterthrush	8		
Orchard Oriole	1		
Osprey	47		
Ovenbird	34		
Palm Warbler	5		
passerine sp.	1		
Peregrine Falcon	4		
Philadelphia/Red-eyed Vireo	1		
Pied-billed Grebe	8		
Pileated Woodpecker	29		
Pine Grosbeak	3		
Pine Siskin	5		
Pine Warbler	16		
Purple Finch	24		
Purple Martin	8		
Red-bellied Woodpecker	16		
Red-breasted Merganser	4		
Red-breasted Nuthatch	7		
Red-eyed Vireo	82		
Red-shouldered Hawk	6		
Red-tailed Hawk	55		
Red-winged Blackbird	235		
Red Crossbill	1		

All Taxa		Subset of T&E Species	
Taxon	# of Unique Obs	Taxon	# of Unique Obs
Redpoll	16		
Ring-billed Gull	103		
Ring-necked Duck	12		
Rock Pigeon	87		
Rose-breasted Grosbeak	47		
Rough-legged Hawk	29		
Ruby-crowned Kinglet	13		
Ruby-throated Hummingbird	4		
Ruffed Grouse	11		
Rusty Blackbird	12		
Sandhill Crane	10		
Savannah Sparrow	59		
Scarlet Tanager	12		
Sedge Wren	2		
Sharp-shinned Hawk	7		
shorebird sp.	2		
Snow Bunting	33		
Snow Goose	16		
Solitary Sandpiper	4		
Song Sparrow	240		
Sora	5		
Spotted Sandpiper	4		
Surf/Black Scoter	1		
Swainson's Thrush	2		
swallow sp.	3		
Swamp Sparrow	105		
Tennessee Warbler	3		
Tree Swallow	72		
Trumpeter Swan	6		
Tufted Titmouse	5		

All Taxa		Subset of T&E Species	
Taxon	# of Unique Obs	Taxon	# of Unique Obs
Tundra Swan	3		
Turkey Vulture	65		
Upland Sandpiper	1		
Veery	61		
Vesper Sparrow	3		
Virginia Rail	16		
Warbling Vireo	60		
White-breasted Nuthatch	79		
White-crowned Sparrow	1		
White-throated Sparrow	36		
White-winged Scoter	1		
Wild Turkey	64		
Willow Flycatcher	29		
Wilson's Snipe	38		
Wilson's Warbler	1		
Winter Wren	2		
Wood Duck	41		
Wood Thrush	32		
woodpecker sp.	1		
Yellow-bellied Sapsucker	46		
Yellow-billed Cuckoo	1		
Yellow-rumped Warbler	14		
Yellow-throated Vireo	16		
Yellow Warbler	103		

ATTACHMENT G
USGS Breeding Bird Survey Results

Attachment G. USGS Breeding Bird Survey Species List, Waddington Route.

Species List
(Myrtle Warbler) Yellow-rumped Warbler
(Yellow-shafted Flicker) Northern Flicker
Alder Flycatcher
American Bittern
American Coot
American Crow
American Goldfinch
American Kestrel
American Redstart
American Robin
American Woodcock
Baltimore Oriole
Bank Swallow
Barn Swallow
Belted Kingfisher
Black-and-white Warbler
Black-billed Cuckoo
Black-capped Chickadee
Black-throated Blue Warbler
Blue Jay
Blue-winged Teal
Bobolink
Brown Thrasher
Brown-headed Cowbird
Canada Goose
Cedar Waxwing
Chestnut-sided Warbler
Chimney Swift
Chipping Sparrow
Cliff Swallow
Common Gallinule
Common Grackle
Common Yellowthroat
Downy Woodpecker
Eastern Bluebird
Eastern Kingbird
Eastern Meadowlark
Eastern Phoebe
Eastern Towhee
Eastern Whip-poor-will
Eastern Wood-Pewee
European Starling
Field Sparrow
Gray Catbird
Gray Partridge
Great Blue Heron
Great Crested Flycatcher
Great Horned Owl
Green Heron
Hairy Woodpecker

Species List
Hermit Thrush
Herring Gull
Horned Lark
House Finch
House Sparrow
House Wren
Indigo Bunting
Killdeer
Least Flycatcher
Mallard
Mourning Dove
Northern Cardinal
Northern Harrier
Northern Rough-winged Swallow
Orchard Oriole
Ovenbird
Pied-billed Grebe
Pileated Woodpecker
Red-eyed Vireo
Red-tailed Hawk
Red-winged Blackbird
Ring-billed Gull
Ring-necked Pheasant
Rock Pigeon
Rose-breasted Grosbeak
Ruffed Grouse
Savannah Sparrow
Scarlet Tanager
Sharp-shinned Hawk
Song Sparrow
Spotted Sandpiper
Swamp Sparrow
Tree Swallow
Turkey Vulture
Upland Sandpiper
Veery
Vesper Sparrow
Warbling Vireo
White-breasted Nuthatch
White-throated Sparrow
Wild Turkey
Willow Flycatcher
Wilson's Snipe
Wood Duck
Wood Thrush
Yellow Warbler
Yellow-bellied Sapsucker
Yellow-throated Vireo

ATTACHMENT H
Audubon Christmas Bird Count Data

Attachment H. Audubon CBC Data for the Canton-Potsdam Count Circle from 2018-2023, St. Lawrence County, New York

Species	2018 Count Date: 12/22/2018	2019 Count Date: 12/22/2019	2020 Count Date: 12/29/2020	2021 Count Date: 12/28/2021	2022 Count Date: 12/28/2022	2023 Count Date: 12/27/2023
Snow Goose						40
Canada Goose	9	14	4	11	19	2243
Trumpeter Swan						2
Mallard					2	2
Common Merganser					2	11
Ring-necked Pheasant					cw	
Ruffed Grouse	3	1	1	2		3
Wild Turkey	3099	92	147	19	181	236
Great Blue Heron	1	1	1		1	
Golden Eagle	1					
Sharp-shinned Hawk			1			cw
Cooper's Hawk	3	1	1	2	3	2
Bald Eagle	3	12	7	22	10	6
Red-tailed Hawk	15	13	9	22	10	10
Rough-legged Hawk	1	2	4	3	2	
Ring-billed Gull						1
Rock Pigeon	335	317	430	256	512	341
Mourning Dove	57	82	158	268	200	137
Great Horned Owl	cw	1	4	4	2	
Barred Owl	1	1	3	1	3	1
Red-bellied Woodpecker	2		2	6	1	7
Yellow-bellied Sapsucker				1		
Downy Woodpecker	38	21	36	23	28	18
Hairy Woodpecker	35	9	37	17	36	21
Northern Flicker	1	1		3	1	1
Pileated Woodpecker	5	1	8	13	2	9
American Kestrel		1	cw	3		cw
Merlin	1			1		
Blue-headed Vireo						cw
Northern Shrike	1	1	3	6	4	
Blue Jay	123	142	187	210	291	173
American Crow	107	167	109	167	170	216
Common Raven	17	18	36	20	54	38
Horned Lark	35	2	20		2	20
Black-capped Chickadee	597	364	583	509	508	527
Tufted Titmouse		1	2	3	1	1
Red-breasted Nuthatch	3		10	3	13	10
White-breasted Nuthatch	57	39	53	5	46	66
Brown Creeper	2	2	2	1	5	13

Species	2018 Count Date: 12/22/2018	2019 Count Date: 12/22/2019	2020 Count Date: 12/29/2020	2021 Count Date: 12/28/2021	2022 Count Date: 12/28/2022	2023 Count Date: 12/27/2023
Winter Wren				1		
Marsh Wren						cw
Golden-crowned Kinglet		4	2	7	1	6
Eastern Bluebird	cw	9		20	cw	3
American Robin	1	17		196	32	10
Gray Catbird				2		
European Starling	433	682	1349	1833	695	605
Bohemian Waxwing	cw		1			
Cedar Waxwing	11	32	11	116	6	27
Snow Bunting	33	34	38	236	189	15
American Tree Sparrow	15	67	49	58	126	94
Chipping Sparrow		1		cw		
Dark-eyed Junco	112	80	122	140	185	177
White-throated Sparrow			3	16	2	cw
Song Sparrow	1	1	1	4		2
Swamp Sparrow						cw
Eastern Towhee			1			
Northern Cardinal	74	12	67	31	111	61
Red-winged Blackbird	1		cw	4	cw	
Rusty Blackbird					1	
Brown-headed Cowbird		9			cw	1
Pine Grosbeak	80		49		9	
House Finch		16	15	12	3	5
Purple Finch			1	6		
Red Crossbill			cw			
Common Redpoll	361		1190	25	cw	
Hoary Redpoll			1			
Pine Siskin			7			
American Goldfinch	52	27	19	203	55	143
Evening Grosbeak			21		38	
House Sparrow	230	255	326	107	280	116

ATTACHMENT I
New York State Breeding Bird Atlas Count Data

Attachment I. New York Breeding Bird Atlas III, species from the Sparrowhawk Point CE block

Species Recorded
Canada Goose (*Branta canadensis*)
Wood Duck (*Aix sponsa*)
Mallard (*Anas platyrhynchos*)
Wild Turkey (*Meleagris gallopavo*)
Rock Pigeon (*Columba livia*)
Mourning Dove (*Zenaida macroura*)
Yellow-billed Cuckoo (*Coccyzus americanus*)
Virginia Rail (*Rallus limicola*)
Sora (*Porzana carolina*)
Killdeer (*Charadrius vociferus*)
American Woodcock (*Scolopax minor*)
Wilson's Snipe (*Gallinago delicata*)
Spotted Sandpiper (*Actitis macularius*)
American Bittern (*Botaurus lentiginosus*)
Least Bittern (*Ixobrychus exilis*)
Green Heron (*Butorides virescens*)
Great Blue Heron (*Ardea herodias*)
Turkey Vulture (*Cathartes aura*)
Osprey (*Pandion halieatus*)
Northern Harrier (*Circus hudsonius*)
Sharp-shinned Hawk (*Accipiter striatus*)
Broad-winged Hawk (*Buteo platypterus*)
Red-tailed Hawk (*Buteo jamaicensis*)
Barred Owl (*Strix varia*)
Belted Kingfisher (*Megaceryle alcyon*)
Yellow-bellied Sapsucker (*Sphryapicus varius*)
Red-bellied Woodpecker (*Melanerpes carolinus*)
Downy Woodpecker (*Dryobates pubescens*)
Hairy Woodpecker (*Dryobates villosus*)
Pileated Woodpecker (*Dryocopus pileatus*)
Northern Flicker (*Colaptes auratus*)
American Kestrel (*Falco sparverius*)
Eastern Wood-Pewee (*Contopus virens*)
Alder Flycatcher (*Empidonax alnorum*)
Willow Flycatcher (*Empidonax traillii*)
Eastern Phoebe (*Sayornis phoebe*)
Great Crested Flycatcher (*Myiarchus crinitus*)
Eastern Kingbird (*Tyrannus tyrannus*)
Yellow-throated Vireo (*Vireo flavifrons*)
Warbling Vireo (*Vireo gilvus*)
Red-eyed Vireo (*Vireo olivaceus*)
Blue Jay (*Cyanocitta cristata*)
American Crow (*Corvus brachyrhynchos*)

Species Recorded
Common Raven (*Corvus corax*)
Black-capped Chickadee (*Poecile atricapillus*)
Bank Swallow (*Riparia riparia*)
Tree Swallow (*Tachycineta bicolor*)
Purple Martin (*Progne subis*)
Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)
Barn Swallow (*Hirundo rustica*)
White-breasted Nuthatch (*Sitta carolinensis*)
Red-breasted Nuthatch (*Sitta canadensis*)
House Wren (*Troglodytes aedon*)
Marsh Wren (*Cistothorus palustris*)
European Starling (*Sturnus vulgaris*)
Gray Catbird (*Dumetella carolinensis*)
Eastern Bluebird (*Sialia sialis*)
Veery (*Catharus fuscescens*)
Wood Thrush (*Hylocichla mustelina*)
American Robin (*Turdus migratorius*)
Cedar Waxwing (*Bombycilla cedrorum*)
House Sparrow (*Passer domesticus*)
Purple Finch (*Haemorhous purpureus*)
American Goldfinch (*Spinus tristis*)
Chipping Sparrow (*Spizella passerina*)
Field Sparrow (*Spizella pusilla*)
White-throated Sparrow (*Zonotrichia albicollis*)
Savannah Sparrow (*Passerculus sandwichensis*)
Song Sparrow (*Melospiza melodia*)
Swamp Sparrow (*Melospiza georgiana*)
Eastern Towhee (*Pipilo erythrophthalmus*)
Bobolink (*Dolichonyx oryzivorus*)
Eastern Meadowlark (*Sturnella magna*)
Baltimore Oriole (*Icterus galbula*)
Red-winged Blackbird (*Agelaius phoeniceus*)
Brown-headed Cowbird (*Molothrus ater*)
Common Grackle (*Quiscalus quiscula*)
Ovenbird (*Seiurus aurocapilla*)
Northern Waterthrush (*Parkesia noveboracensis*)
Black-and-white Warbler (*Mniotilta varia*)
Common Yellowthroat (*Geothlypis trichas*)
American Redstart (*Setophaga ruticilla*)
Northern Parula (*Setophaga americana*)
Yellow Warbler (*Setophaga petechia*)
Chestnut-sided Warbler (*Setophaga pensylvanica*)
Pine Warbler (*Setophaga pinus*)
Yellow-rumped Warbler (*Setophaga coronata*)

Species Recorded
Scarlet Tanager (*Piranga olivacea*)
Northern Cardinal (*Cardinalis cardinalis*)
Rose-breasted Grosbeak (*Pheucticus ludovicianus*)
Indigo Bunting (*Passerina cyanea*)