

**Rich Road Solar Energy Center  
Matter No. 22-00031  
§900-2.12 Exhibit 11: Terrestrial Ecology**



# Table of Contents

<b>11.0</b>	<b>EXHIBIT 11 - TERRESTRIAL ECOLOGY .....</b>	<b>11-1</b>
	SUMMARY OF EXHIBIT .....	11-1
11.1	Plant Communities (19 NYCRR § 900-2.12(a)).....	11-2
11.2	Impacts to Plant Communities (19 NYCRR § 900-2.12(b)).....	11-4
11.3	Measures to Avoid or Minimize Plant Community Impacts (19 NYCRR § 900-2.12(c)) .....	11-7
	11.3.1 Woody Vegetation and Tree Clearing.....	11-7
	11.3.2 Co-Utilization of Agricultural Lands.....	11-9
	11.3.3 Construction and Operation Practices .....	11-9
11.4	Wildlife and Wildlife Habitat (19 NYCRR § 900-2.12(d)).....	11-10
11.5	Impacts to Wildlife, Wildlife Habitats, and Wildlife Travel Corridors (19 NYCRR § 900-2.12(e)).....	11-12
11.6	Measures to Avoid or Minimize Impacts to Wildlife and Wildlife Habitats (19 NYCRR § 900-2.12(f)).....	11-16
11.7	UNIFORM STANDARDS AND CONDITIONS.....	11-16
11.8	REFERENCES .....	11-19

## List of Tables

Table 11.2-1	Estimated Temporary and Permanent Impacts to Plant Communities within the Limits of Disturbance (acres).....	11-6
Table 11.3-1	Acres of Trees and Woody Plant Communities within the Limit of Disturbance, Facility Site, and Project Area .....	11-8
Table 11.7-1	Applicable Uniform Standards and Conditions for Terrestrial Ecology .....	11-17

## List of Appendices

Appendix 11-A	Figures.....	A-1
	Figure 11-1 Habitat Classifications	
Appendix 11-B	Wildlife Species Potentially Present within the Study Area .....	B-1

**§ 900-2.12 Exhibit 11 Terrestrial Ecology**

<b>Information</b>	<b>Found in Section</b>
Exhibit 11 shall contain:	
a) An identification and description of the type of plant communities present on the Facility Site, and adjacent properties within one hundred (100) feet of areas to be disturbed by construction, including the interconnections, based upon field observations and data collection.	11.1 Appendix 11-A
b) An analysis of the temporary and permanent impact of the construction and operation of the facility and the interconnections on the vegetation identified, including a mapped depiction of the vegetation areas showing the areas to be removed or disturbed.	11.2
c) An identification and evaluation of avoidance measures or, where impacts are unavoidable, minimization measures, including the use of alternative technologies, regarding vegetation impacts identified.	11.3
d) A list of the species of mammals, birds, amphibians, terrestrial invertebrates, and reptiles that are likely to occur based on ecological communities present at, and bird and bat migration routes through, the facility, supplemented as necessary by site surveys, site observations and publicly available sources.	11.4 Appendix 11-B
e) An analysis of the impact of the construction and operation of the facility and interconnections on wildlife, wildlife habitats, and wildlife travel corridors, other than a NYS threatened or endangered species or species of special concern (which will be addressed pursuant to section 900-2.13 of this Part).	11.5
f) An identification and evaluation of avoidance measures or, where impacts are unavoidable, minimization measures, including the use of alternative technologies, regarding impacts to wildlife and wildlife habitat.	11.6

## 11.0 EXHIBIT 11 - TERRESTRIAL ECOLOGY

### SUMMARY OF EXHIBIT

Rich Road Solar Energy Center, LLC (RRSEC) assessed potential impacts to terrestrial vegetation and wildlife resources associated with the construction and operation of the Facility. The Study Area for this exhibit consists of the Facility Site and the surrounding adjacent properties within a 100-foot buffer, as required by 19 New York Codes, Rules, and Regulations (NYCRR) § 900-2.12(a). This exhibit was prepared using information obtained from agency correspondence and publicly available sources, including reports, published literature, online databases, geographic information system data, and site-specific field surveys conducted in support of Exhibit 12 NYS Threatened and Endangered Species and Exhibit 14 Wetlands. This exhibit discusses impacts to species and habitats not currently listed as threatened or endangered in New York State. Exhibit 12 NYS Threatened or Endangered Species discusses impacts to threatened and endangered species and their habitats, including Blanding's turtle (*Emydoidea blandingii*) and select grassland bird species.

Construction and operation of the Facility will result in temporary disturbance due to vegetation clearing for construction and temporary laydown yard, as well as permanent impacts on vegetated habitats resulting from the Facility's access road conversion, pad-mounted inverters, battery energy storage system (BESS), operations and maintenance (O&M) building, collection substation, and switchyard station. Whenever possible, RRSEC sited these components to prioritize avoiding interior forests and wetlands, with the majority of them sited in agricultural areas. RRSEC avoided and minimized impacts to plant communities through siting and the layout, such that the majority of the impacts to plant communities will occur in crop lands, including field and row crops. The siting of the Facility avoided the majority of the 1,059 acres of trees and woody plant communities in the Project Area, including limiting the area of disturbance within the Facility Site to completely avoid a total of 848 acres of woody vegetation within the larger Project Area.

All major ecological communities within parcels that will host Facility components are common in New York State. Therefore, no impacts to unique or rare natural communities will result from construction.

Changes in vegetation could influence the behavior of wildlife species by changing the quality and quantity of habitat for foraging, nesting, movement between habitats, or roosting (in the case of grassland bird species). Facility components were sited to minimize impacts to wildlife habitat, to the maximum extent practicable, by prioritizing avoidance of wildlife habitat, including forests, shrublands, and wetlands. Most of the Facility Site will be revegetated following construction. At the end of the Facility's lifespan, Facility components will be decommissioned, and the land will be restored as described in Exhibit 23 Site Restoration and Decommissioning. Following

decommissioning and restoration, lands within the Facility Site will return to their previous condition and use, including agriculture, depending on the intentions of the landowners.

## 11.1 PLANT COMMUNITIES (19 NYCRR § 900-2.12(a))

The Study Area for this exhibit consists of the Facility Site and adjacent properties within a 100-foot buffer surrounding the limit of disturbance (LOD). The Study Area is dominated by agricultural lands (croplands and pastureland, and deciduous forest), as outlined in detail below. Plant communities within the Study Area were further classified into specific community descriptions provided in *Ecological Communities of New York State* (Edinger et al. 2014) and mapped based on additional data collected during the 2022 field surveys. Figure 11-1 in Appendix 11-A depicts the following ecological communities:

- **Beech–maple mesic forest:** A hardwood forest comprising codominant sugar maple (*Acer saccharum*) and American beech (*Fagus grandifolia*) found on moist, well-drained, typically acidic soils.
- **Cropland/field crops:** A type of agricultural land with field crops, including alfalfa, wheat, timothy, and oats, as well as hayfields that are rotated to pastureland.
- **Cropland/row crops:** An agricultural field planted in row crops such as corn, potatoes, and soybeans. This community includes vegetable gardens in residential areas.
- **Deep emergent marsh:** A marsh community that occurs on mineral soils or fine-grained organic soils (muck or well-decomposed peat); the substrate is flooded by waters that are not subject to violent wave action. Water depths can range from 6 inches to 6.6 feet; water levels may fluctuate seasonally, but the substrate is rarely dry, and there is usually standing water in the fall. This is a somewhat broadly defined type that includes several variants based on the dominant plants. Deep emergent marshes are quite variable. They may be co-dominated by a mixture of species, or have a single dominant species.
- **Pastureland:** A type of agricultural land permanently maintained as a pasture area for livestock.
- **Pine-northern hardwood forest:** A type of mixed forest found on gravelly outwash plains, delta sands, eskers, and dry lake sands in the Adirondacks. Dominant trees are white pine (*Pinus strobus*) and red pine (*P. resinosa*).
- **Red maple–hardwood swamp:** A hardwood swamp that occurs in poorly drained depressions, usually on inorganic soils. This is a broadly defined community with many regional and edaphic variants. In any given stand, red

maple (*Acer rubrum*) is either the only canopy dominant, or it is co-dominant with one or more hardwoods, including ashes (*Fraxinus pennsylvanica*, *F. nigra*, and *F. americana*), elms (*Ulmus americana* and *U. rubra*), yellow birch (*Betula alleghaniensis*), and swamp white oak (*Quercus bicolor*). The shrub layer is usually well developed and may be quite dense.

- **Vernal pool:** An ephemerally flooded shallow depression, surrounded by a fringe of red maple–hardwood swamp that quickly transitions to upland forest.
- **Shallow emergent marsh:** A marsh meadow community that occurs on mineral soil or deep muck soils (rather than true peat) that are permanently saturated and seasonally flooded. This marsh is better drained than a deep emergent marsh; water depths may range from 15 centimeters to 1 meter (6 inches to 3.3 feet) during flood stages, but the water level usually drops by mid-to late summer and the substrate is exposed during an average year. This is a very broadly defined type that includes several distinct variants and many intermediates. Shallow emergent marshes are very common and quite variable. They may be co-dominated by a mixture of species or have a single dominant species.
- **Shrub swamp:** A mostly inland wetland dominated by tall shrubs that occurs along the shore of a lake or river, in a wet depression or valley not associated with lakes, or as a transition zone between a marsh, fen, or bog and a swamp or upland community. The substrate is usually mineral soil or muck. A few examples may have a shallow layer of sphagnum peat. This is a very broadly defined type that includes several distinct communities and many intermediates. Shrub swamps are very common and quite variable. They may be co-dominated by a mixture of species or have a single dominant shrub species.
- **Successional northern hardwoods:** Successional northern hardwood forests are composed of hardwood or mixed forests that occur on sites that have been cleared or otherwise previously disturbed.
- **Successional old field:** A meadow dominated by forbs and grasses that occurs on sites that have been cleared and plowed (for farming or development), and then abandoned. Includes fields mowed at an interval (e.g., less than once per year) that favors the reproduction of characteristic successional old field species.
- **Successional shrubland:** A shrubland that occurs on sites that have been cleared or disturbed. This community has at least 50 percent cover of shrubs.

The Invasive Species Control and Management Plan and baseline mapping survey, prepared in compliance with 6 NYCRR Part 575, will be submitted during Pre-construction Compliance Filings in accordance with 19 NYCRR §900-10.2(f).

## 11.2 IMPACTS TO PLANT COMMUNITIES (19 NYCRR § 900-2.12(b))

Table 11.2-1 provides estimated acreages of impacts associated with temporary impacts, permanent conversion, and permanent impacts by plant community type. To estimate impacts to ecological communities, RRSEC developed the following potential impact classifications:

- **Temporary Impacts within the Limit of Disturbance (LOD):** This limit encompasses the anticipated outer bounds of where construction of the Facility may occur, including any necessary vegetation clearing. This boundary includes defined work corridors along Facility components, security fencing, and proposed planting modules and incorporates areas where construction vehicles and/or personnel may need extra room to construct the Facility, which are not otherwise counted as permanent conversion or permanent impact (defined below). These temporarily impacted areas will be restored following construction and will not be disturbed during Facility operation. These temporary impacts are presented with mapping of plant communities in Figure 11-1. The use of machinery to install Facility components within the LOD may also result in temporary soil impacts, further described in Exhibit 10 Geology, Seismology and Soils and Exhibit 15 Agricultural Resources.
- **Permanent Conversion:** Represents all areas that will have maintained vegetation for the life of the Facility in accordance with the Vegetation Management Plan, which will be submitted as a pre-construction compliance filing in accordance with 19 NYCRR § 900-10.2. This generally includes all areas within the fence line, areas adjacent to access roads outside the fence line where road edges will be mowed/maintained, areas adjacent to the collection substation and switchyard station, visual screening plantings, and areas maintained for stormwater purposes. These areas of permanent conversion do not include areas that will be allowed to naturally return to a vegetated state after construction is complete, such as collection line corridors.
- **Permanent Impacts:** Represents the Stormwater Pollution Prevention Plan Future Impervious Area, or all areas that will host built components of the Facility. These permanent impacts will include areas where the collection substation and switchyard station, inverters and transformers, BESS, O&M building, and access roads will be located. These areas will be cleared of all vegetation, graded, and grubbed prior to installation, where applicable. They represent



permanent impacts to existing plant communities during construction and operation of the Facility. Areas considered permanent impacts will be altered during construction and operation of the Facility. These areas will be restored following decommissioning of the Facility Site (see Exhibit 23 Site Restoration and Decommissioning for additional information).

As shown in Table 11.2-1, permanent impacts to existing plant communities during construction and operation of the Facility total 35 acres, or 2 percent of the Facility Site. Permanent conversion of existing plant communities to maintained vegetation impacts total approximately 1,133 acres, or 65 percent of the Facility Site and temporary impacts occur to 547 acres or 31 percent of the Facility Site. The majority of these temporary impacts reflect the portions of the Facility Site that will be maintained as perennial pasture for managed sheep grazing, as further described in Section 11.3.2 and in the Agricultural Co-Utilization Plan provided in Exhibit 15 Agricultural Resources, potentially reducing the areas permanently converted to managed vegetation.

Areas where agricultural activities will resume during operations will be seeded with a seed mix specified by the landowner/agricultural producer or as otherwise recommended in the New York State Department of Agriculture and Market's *New York State Farmland: Seeding, Fertilizing and Lime Recommendations for Gas Pipeline Right-of-Way Restoration in Farmlands* (revised June 5, 2015). In upland areas where agricultural activities will not resume, RRSEC anticipates revegetating graded areas with a seed mix designed for solar sites composed of fescues (*Festuca* spp.), Kentucky bluegrass (*Poa pratensis*), and white clover (*Trifolium repens*) or equivalent. For wetland areas that are temporarily impacted during construction, RRSEC anticipates reseeding with Ernst Conservation's OBL Wetland Mix, Southern Tier's Northeast Wetland Grass/Forb Mix, or an equivalent native obligate wetland seed mix appropriate to the site. The construction seeding plan will be submitted in the Vegetative Management Plan during Pre-construction Compliance Filings in accordance with 19 NYCRR §900-10.2. In areas of temporary construction impacts, RRSEC will not use herbicides to prevent sprouting and will not remove trees as part of routine vegetation management during operations, unless for emergency tree removal from storm damage. During operations, some temporary vegetation disturbance will occur from vehicular traffic in areas where photovoltaic (PV) panel arrays are installed.

All plant communities identified within the Study Area are common in New York State; therefore, no impacts to unique or rare natural communities will result from construction. Temporary and permanent impacts to plant communities will not result in the extirpation or significant reduction of any natural ecological community type, or in the significant reduction of any plant community type within the Study Area.

**Table 11.2-1 Estimated Temporary and Permanent Impacts to Plant Communities within the Limits of Disturbance (acres)**

Community Type <sup>1</sup>	Facility Site	Temporary Impacts <sup>2</sup>	Permanent Conversion <sup>3</sup>	Permanent Impact	Total Impacts <sup>4</sup>
<b>Agricultural Areas</b>					
Cropland / Field Crops	480	145	316	15	476
Cropland / Row Crops	679	96	567	13	676
Pastureland	308	229	72	6	306
<b>Subtotal</b>	<b>1,467</b>	<b>471</b>	<b>954</b>	<b>33</b>	<b>1,458</b>
<b>Forested Communities</b>					
Beech-Maple Mesic Forest	6	2	5	-	6
Pine-Northern Hardwood Forest	22	3	19	<0.1	22
Red Maple-Hardwood Swamp	14	<0.1	13	<0.1	13
Successional Northern Forest	106	7	97	1	105
<b>Subtotal</b>	<b>148</b>	<b>12</b>	<b>133</b>	<b>2</b>	<b>147</b>
<b>Non- Forested Communities</b>					
Deep Emergent Marsh	1	1	-	-	1
Shallow Emergent Marsh	70	50	-	0.1	50
Shrub Swamp	18	0.1	10	-	10
Successional Old Field	5	5	<0.1	<0.1	5
Successional Shrubland	46	9	36	0.2	45
<b>Subtotal</b>	<b>140</b>	<b>64</b>	<b>46</b>	<b>0.4</b>	<b>111</b>
<b>Total<sup>4</sup></b>	<b>1,755</b>	<b>547</b>	<b>1,133</b>	<b>35</b>	<b>1,716</b>

Notes:

<sup>1</sup> Based on *Ecological Communities of New York* (Edinger et al. 2014), as described in Section 11.2.1.

<sup>2</sup> Temporarily impacted agricultural areas will return to agricultural uses following construction. Temporarily impacted ecological communities will be restored following construction and will be allowed to naturally revegetate.

<sup>3</sup> Areas that will be cleared during construction and maintained as early successional communities during operations. The conversion of active row cropland to early successional communities is expected to result in a net benefit to wildlife and soil resources.

<sup>4</sup> Rounded values.

-- None

## **11.3 MEASURES TO AVOID OR MINIMIZE PLANT COMMUNITY IMPACTS (19 NYCRR § 900-2.12(c))**

As described in Exhibit 2 Overview and Public Involvement, the siting process included desktop analyses and extensive field surveys to identify sensitive resources. The resulting Facility Site consists primarily of available flat, open, and appropriately oriented land for the panels and avoidance of sensitive resources in the Project Area. Within the Facility Site, RRSEC sited the majority of Facility components in previously disturbed agricultural land, thus avoiding significant impacts to sensitive plant communities. RRSEC sited access roads on existing roads and farm lanes wherever possible and confined areas of disturbance to the smallest practicable area, thus minimizing the LOD. As a result, RRSEC avoided and minimized impacts to plant communities through siting and the layout, such that the majority of the impacts to plant communities will occur in crop lands, including field and row crops. As shown in Table 11.2-1 above, crop lands represent approximately 44 percent of temporary impacts, 78 percent of permanent conversion, and 80 percent of permanent impacts to all plant communities. RRSEC's measures to avoid and minimize impacts to plant communities also include minimization of tree clearing, revegetation with plant communities suitable for co-utilization plan for managed sheep grazing, and construction and operation practices, described in detail below.

### **11.3.1 Woody Vegetation and Tree Clearing**

RRSEC will further avoid impacts to sensitive plant communities, including trees and woody vegetation within shallow emergent marshes, deep emergent marshes, shrub swamps, and red maple-hardwood swamps. As shown on Figure 11-1, RRSEC sited the Facility to avoid New York State wetlands north of Array A, south of Jingleville Road and south of Array I. During consultations with the Town of Canton, town representatives expressed concerns about potential for extensive tree clearing for construction and operation. To address these concerns, and to protect sensitive plant communities, RRSEC sited the solar panels, substation, switchyard station, O&M building, and BESS within croplands to avoid tree clearing. Siting of the Facility and individual components also was designed to avoid and minimize impacts to sensitive plant communities mapped during wetland field surveys. As shown in Table 11.3-1, the Project Area contains approximately 1,059 acres of trees and woody plant communities. Siting of the Facility Site avoided a significant percentage of these resources and further limited the area of disturbance within the Facility Site to completely avoid a total of 848 acres of woody vegetation within the larger Project Area.

**Table 11.3-1 Acres of Trees and Woody Plant Communities within the Limit of Disturbance, Facility Site, and Project Area**

	<b>Limit of Disturbance<sup>1</sup></b>	<b>Facility Site</b>	<b>Project Area</b>
Beech-Maple Mesic Forest	6	102	219
Pine-Northern Hardwood Forest	22	26	73
Red Maple-Hardwood Swamp	14	75	159
Vernal Pool (within wooded area)	--	5	5
Shrub Swamp	18	69	176
Successional Northern Forest	106	267	293
Successional Shrubland	46	111	134
<b>Total<sup>2</sup></b>	<b>211</b>	<b>656</b>	<b>1,059</b>
<b>Area Avoided<sup>2</sup></b>	<b>848</b>	<b>403</b>	<b>--</b>

Note:

<sup>1</sup> The limit of disturbance is within the Facility Site. The Facility Site is within the Project Area.

<sup>2</sup> Rounded values.

The following are specific examples of siting to avoid areas of contiguous forest as shown in Figure 11-1 (parcel locations are depicted on Exhibit 4 Figure 4-2):

- Facility components avoid impacts on contiguous forest on parcels 87.004-1-21.121, 87.004-2-2, and 88.003-1.
- Array A on parcel 88.003-1-3.1-4 completely avoids impacts to a contiguous forested area.
- Array E on the western side of parcel 88.003-1-28 minimizes tree clearing for shading of the PV panels within a large contiguous forest bounding Church Brook.

As shown in 11.3-1, there are 211 acres of forest within the LOD. Of this 211 acres, the total impacts to forested areas encompasses 147 acres for construction and operation of Facility components to maintain efficiencies with construction and design (see Table 11.2-1). Whenever possible, RRSEC sited these components to prioritize avoiding interior forests and wetlands, with the majority sited within agricultural areas. Interior forest areas are not influenced by edge effects and are calculated using a 300-foot buffer from the edge of forest habitats (Gehlhausen et al. 2000). Interior forests are discussed in detail in Section 11.5.

### **11.3.2 Co-Utilization of Agricultural Lands**

RRSEC prioritized siting of Facility components on cropland and pasture, a majority of which will be considered permanent conversion or temporary impacts. Utilizing these cropland and pasture areas for Facility components and laydown areas during construction will result in minimal temporary impacts and minimal permanent impacts to native ecological communities.

RRSEC evaluated and designed the Facility Site for compatibility with establishment of perennial pasture for managed sheep grazing as a commercially viable co-location strategy. RRSEC developed an Agricultural Co-Utilization Plan, provided in Exhibit 15 Agricultural Resources, for potentially reducing the areas permanently converted to managed vegetation. RRSEC is coordinating with area farmers interested in scaling their livestock operations to meet this opportunity and other possible agrivoltaic options that may arise during the lifetime of the Facility. RRSEC proposes sheep grazing within all solar arrays, with exceptions for state-regulated wetlands occurring under solar panels (as outlined in Exhibit 14 Wetlands). As reflected in Table 11.2-1, up to 229 acres of land currently classified as pastureland may be utilized for sheep grazing during operations and will therefore only be temporarily impacted only during construction.

### **11.3.3 Construction and Operation Practices**

RRSEC will employ alternative technologies to avoid and minimize clearing and earthmoving activities within wetlands, their adjacent areas, and their associated vegetation, thereby reducing resultant impacts to associated plant communities. For example, RRSEC will use trenchless technology, or horizontal directional drilling, to install collection lines under one state-regulated stream (W401) and use selective tree removal methods that minimize soil disturbance and retain the existing root biomass and seed bank (e.g., tree cutting using manual methods and/or the use of timber matting during mechanical tree removal). Exhibit 14 Wetlands provides further discussion of these practices.

Other measures to avoid or minimize impacts to vegetation include marking sensitive areas (such as wetlands) where no disturbance or vehicular activities will be allowed, educating the construction workforce on respecting and adhering to the physical boundaries of off-limit areas, employing best management practices during construction, and maintaining a clean work area within the designated construction sites. An independent environmental monitor will conduct inspections of areas requiring environmental compliance during construction activities, with an emphasis on those activities in sensitive areas. To protect adjacent undisturbed vegetation and other ecological resources, a comprehensive sediment and erosion control plan is provided in Exhibit 13 Water Resources and Aquatic Ecology, Appendix 13-B, Stormwater Pollution Prevention Plan.

An Invasive Species Control and Management Plan that includes prescribed measures to control invasive species throughout the area of disturbance will be developed for RRSEC, in accordance with 19 NYCRR § 900-10.2, Pre-Construction Compliance Filings.

Following construction activities, temporarily disturbed areas will be seeded (and stabilized with mulch and/or straw, if necessary) to reestablish vegetative cover in these areas. With the exception of active agricultural fields, native species will be allowed to revegetate temporarily disturbed areas. At the end of the Facility's life, RRSEC will remove Facility components and restore the land, as described in Exhibit 23 Site Restoration and Decommissioning. As discussed in Exhibit 15 Agricultural Resources, future soil productivity after decommissioning of the Facility is expected to remain and the replacement of row crops with diverse pollinator seed mix, which would include native species, may result in less soil erosion and improved soil conditions over time. Following completion of decommissioning and restoration, lands within the Study Area are expected to return to pre-construction conditions.

#### **11.4 WILDLIFE AND WILDLIFE HABITAT (19 NYCRR § 900-2.12(D))**

Appendix 11-B lists mammals, birds, amphibians, terrestrial invertebrates, and reptiles that may occur within the Study Area based on site surveys, site observations and publicly available sources, as required by 19 NYCRR § 900-2.12(d).

Wildlife and habitat potentially present within the Study Area were identified through a review of existing information obtained from publicly available sources, and the site-specific Wildlife Site Characterization Study provided in Exhibit 12 NYS Threatened and Endangered Species, Appendix 12-A), Wintering Grassland Raptor Surveys (Appendix 12-B), and Breeding Bird Surveys (Appendix 12-C). Exhibit 12 NYS Threatened or Endangered Species provides discussion of impacts to threatened and endangered species and their habitats. The following public data sources provided information on wildlife and habitats (citations for each are included in Appendix 12-A):

- New York's Environmental Assessment Form Mapper, maintained by the New York State Department of Environmental Conservation (NYSDEC);
- New York Natural Heritage Program (NYNHP);
- U.S. Fish and Wildlife Service Information for Planning and Conservation (IPaC) and Environmental Conservation Online System Databases (USFWS 2020);
- New York's Environmental Resource Mapper, maintained by NYSDEC (NYSDEC 2020a);
- NYSDEC Nature Explorer tool (NYSDEC 2020b);

- *Checklist of the Amphibians, Reptiles, Birds and Mammals of New York, Including Their Protective Status*, published by the NYSDEC Wildlife Diversity Group (NYSDEC 2019);
- Biodiversity and Wind Siting Mapping Tool, developed by The Nature Conservancy, New York Natural Heritage Program, and the New York State Energy and Research Development Authority;
- eBird (eBird 2020);
- Audubon Christmas Bird Counts;
- The U.S. Geological Service Breeding Bird Survey;
- The New York Breeding Bird Atlas III (NYSDEC 2020c);
- Data from the New York State Ornithological Association, Inc.;
- National Land Cover data (USGS 2019);
- U.S. Fish and Wildlife Service National Wetlands Inventory;
- NYSDEC Freshwater Wetland data;
- Species range maps for mammals provided by the International Union for Conservation of Nature (IUCN) (IUCN 2021);
- iNaturalist research-grade observations (Ueda 2021);
- The National Conservation and Easement database; and
- Data regarding other areas of interest (e.g., Audubon Important Bird Areas, national wildlife refuges, wildlife management areas, grassland focus areas, core forest blocks, and known bat hibernacula).

The presence of mammals, including small mammals, was determined using the *Checklist of the Amphibians, Reptiles, Birds and Mammals of New York, Including Their Protective Status* (NYSDEC 2019) and IUCN range maps. Presence of terrestrial invertebrates was determined using research-grade observations reported to iNaturalist for St. Lawrence County, New York.

The Facility Site is located within NYSDEC Grassland Focus Area 5, which extends along the St. Lawrence Valley and north of the Adirondack Mountains. Focus Area 5 contains breeding grounds for grassland species based on data from the third New York State Breeding Bird Atlas and Audubon New York surveys to identify regions supporting these core population (NYSDEC 2021). The Facility Site also abuts the southern portion of the Lisbon Grasslands Important Bird Area. This region is characterized as a large mosaic of wetlands and grasslands.

The NYNHP indicated that one state-listed threatened species, Blanding's turtle, was documented as occurring within 0.5 miles of the Facility Site. Exhibit 12 NYS Threatened or Endangered Species provides additional detail Blanding's turtle habitat within the Facility Site.

No special status lands occur within the Study Area. The National Conservation Easement database did not identify any easement blocks over 150 acres of contiguous forest within the Facility Site (TFPL and DU 2020). Additionally, the NYNHP and Nature Conservancy's Matrix Forest Blocks and Linkages dataset did not identify areas of large contiguous forest within the Facility Site (TNC Eastern Conservation Science 2012).

## **11.5 IMPACTS TO WILDLIFE, WILDLIFE HABITATS, AND WILDLIFE TRAVEL CORRIDORS (19 NYCRR § 900-2.12(e))**

Construction-related impacts to wildlife are anticipated to be limited to habitat disturbance and loss, temporary displacement of wildlife due to behavioral disturbance, and incidental injury and mortality due to construction activity and vehicular movement. Operation-related impacts to wildlife include direct habitat impact, some habitat and travel corridor degradation through fragmentation, and disturbance/displacement due to presence of PV panel arrays.

Exhibit 12 NYS Threatened or Endangered Species provides discussion of impacts to threatened and endangered species and their habitats, including Blanding's turtle and select grassland bird species. The following discussion applies only to non-listed species.

### **Habitat Disturbance and Loss, Habitat Fragmentation**

Changes in vegetation could influence the behavior of wildlife species by changing the quality and quantity of habitat for foraging, nesting, roosting, or movement between habitats. Facility components have been sited to minimize impacts to wildlife habitat by siting PV panel arrays in agricultural fields used to produce field and row crops to the maximum extent practicable. This will minimize the impacts to higher-quality wildlife habitat, including forests, shrublands, and wetlands. As shown in Table 11.2-1, crop lands represent the majority of temporary impacts, permanent conversion, and permanent impacts to vegetation. RRSEC developed an Agricultural Co-Utilization Plan, provided in Exhibit 15 Agricultural Resources, that potentially would reduce the areas permanently converted to managed vegetation. The replacement of row crops with diverse pollinator seed mix that would include natives may provide alternative suitable habitat for many species. It is anticipated that the majority of wildlife present in the Study Area will return to temporarily disturbed areas following construction.



Habitat fragmentation resulting from the Facility's operation may affect the movement within travel corridors, breeding, and/or roosting behavior of various species across the landscape. Facility fencing will limit access to habitats within the Facility Site to species incapable of passing through the chain-link fence. Examples include deer grazing or bedding in former hay fields, foxes hunting small mammals, or isolation from burrows for some mammals present before construction. Additionally, large, fenced areas may force wildlife to travel greater distances between habitat patches. Wherever possible, hedgerows were preserved to maintain travel corridors between habitat patches, although some will be eliminated resulting in greater travel distances between certain habitat patches. For example, several hedgerows around Array E will be preserved (see Exhibit 8 Visual Impacts Appendix 8-A Attachment 8-D Landscape Mitigation Plan).

Wherever feasible, RRSEC sited Facility components and limited temporary impacts from construction in areas currently used for field and row crops in an effort to minimize impacts from habitat fragmentation. Exclusion from habitats will be limited to fencing areas off from wildlife access. RRSEC sited fencing as close to PV array panels as practicable to minimize acreage of these areas. Fragmentation will primarily be limited to collection line and access road corridors through previously contiguous forest patches. Lastly, while the majority of tree clearing is on the edges of existing fields, the installation of panels in Arrays D and E will require clearing some interior forest, resulting in an increase of forest edges and edge effects. Interior forests are areas that are not influenced by edge effects and are calculated using a 300-foot buffer from the edge of forest habitats. As forestland is cleared for construction and operation of the Facility, this moves this 300-foot buffer inward, converting previously interior forest to exterior forest.

With regards to forestland birds, sensitivity to habitat fragmentation varies by species; forest interior species show the highest degree of sensitivity (Bannerman 1998). Of the total forestland within the Facility Site, 208 acres have been classified as interior forest. Construction will result in approximately 3.5 acres of interior forest clearing, as well as in the increase of approximately 1.3 acres of forest edge (edge effect). Facility components will not bisect any interior forests; therefore, no fragmentation impacts to forest interior species are expected locally within the Study Area, and a majority of contiguous sections of the forested areas within the Study Area will remain intact.

Within the NYSDEC Grassland Focus Area 5, construction will result in the permanent impact of 33 acres of cropland and pastureland, and 883 acres of cropland will be converted to early successional habitat within the Facility Site. However, of the total impacts to agricultural land, approximately 320 acres will occur in areas currently cultivated as field crops, which typically provide limited/marginal habitat for grassland birds. As such, direct impacts to NYSDEC Grassland Focus Area 5 and the adjacent Lisbon Grasslands Important Bird Area are not anticipated to result from facility construction or operation. In contrast, the maintained early successional areas under PV panel arrays are expected to provide considerable habitat value for many wildlife species, including some grassland bird species. This landscape contains an extensive network of

agricultural land, including cropland and pastureland. Given the extent of available agricultural and grassland habitat adjacent to the Facility Site and beyond the Study Area, impacts to these habitats do not represent significant fragmentation impacts at the landscape or regional level.

Forested fragmentation effects on bats are not well understood, and the effects may vary across species based on preferred prey, foraging areas, roosting needs, and flight morphology. Although measures to avoid direct take of bats will be implemented for tree clearing, suitable roosting areas for some species may be lost due to tree clearing associated with construction. However, suitable roosting habitat is prevalent throughout the region and near the Facility Site, and construction will only permanently affect 16 percent of forested lands within the Study Area. Additionally, the creation of open areas and forest edge may benefit some species, such as little brown bat (*Myotis lucifugus*) and big brown bat (*Eptesicus fuscus*), by increasing foraging opportunities. Given the small percentage of forested habitat impacted, and the fact that the majority of forest impacts are on the edges of forests, it is unlikely that habitat fragmentation will have a significant impact on any bat species.

The U.S. Fish and Wildlife released its final rule to reclassify the northern long-eared bat (*Myotis septentrionalis*) as an endangered species under the Endangered Species Act beginning January 30, 2023. However, this species was not identified in the Wildlife Site Characterization report as being present within the Study Area (see Exhibit 12 NYS Threatened or Endangered Species, Section 12.2) and was also not included in the draft Determination of Occupied Habitat and Incidental Take and Net Conservation Benefit received from the Office of Renewable Energy Siting (see Exhibit 12 NYS Threatened or Endangered Species Section 12.4).

### **Behavioral Disturbance and Displacement**

Some wildlife displacement may occur due to increased noise and human activity associated with construction. The significance of this impact will vary by species and the seasonal timing of construction activities. Impacts are expected to be minimal given the limited value to wildlife of the impacted areas. As discussed above, the majority of land within the Facility Site is subject to frequent mechanical disturbance associated with farming activities; therefore, it is anticipated that most wildlife encountered will be accustomed to mechanical disturbances associated with large equipment. Outside of localized displacement due to construction disturbance in the immediate vicinity of Facility components, no significant displacement impacts on wildlife species are anticipated during construction.

Habitat alteration and disturbance resulting from operations may render some areas within the Facility Site unsuitable or less suitable for nesting, foraging, roosting, or other wildlife use. All perimeter fencing will include a minimum 6-inch gap left at the bottom to allow animal movement (primarily turtles) through the Facility Site. Therefore, fencing off areas may result in permanent displacement of larger animals unable to pass under the 4-by-4-inch wire knot fence. However, RRSEC sited Facility components mainly on agricultural land subject to frequent disturbances associated with farming activities such as tilling, plowing, pesticide application, mowing/harvesting, and livestock grazing. PV panel arrays, the substation, O&M building, and the BESS have been preferentially sited in active agricultural areas to avoid the need to clear significant areas of forest or impact other valuable wildlife habitat such as wetlands. Given that the area underneath the PV panel arrays will be maintained as early successional habitat during operation, it is expected that more generalist grassland avian species, small mammals, terrestrial invertebrates, reptiles, and amphibians will successfully utilize these areas. However, the presence of PV panel arrays may render these habitats unsuitable for certain species that will otherwise utilize these areas for foraging, roosting, and breeding habitat, particularly bird species that generally require large, open grassland areas to hunt for insects or small mammals and establish breeding territories. This displacement of avian and larger mammalian predators may result in an increased number of prey species within the fence line and under the PV panels.

### **Incidental Injury or Mortality**

Direct impacts from construction may include incidental injury or mortality due to construction equipment. Potential mortality is expected to be low because equipment used in solar energy facility construction generally moves at slow rates or is stationary for long periods (e.g., earth-moving equipment and pile-driving equipment). In addition, much of the land directly impacted within the Facility Site is currently used to produce field crops. Such areas typically provide limited food and cover for most wildlife species and are routinely subject to disturbance-related farming activities (e.g., plowing, mowing, and pesticide application).

Incidental injury and mortality during Facility construction should be limited to juvenile and sedentary/slow-moving species that are unable to move out of the area disturbed by construction, such as small mammals, ground-nesting bird eggs and hatchlings, reptiles, amphibians, and invertebrates. More mobile species and mature individuals should be able to vacate areas disturbed by construction. Vehicle-related mortality may increase temporarily due to increased traffic during construction; however, as traffic decreases upon the completion of construction, so will the potential for wildlife-vehicle collisions.

## 11.6 MEASURES TO AVOID OR MINIMIZE IMPACTS TO WILDLIFE AND WILDLIFE HABITATS (19 NYCRR § 900-2.12(f))

RRSEC will avoid and minimize impacts to wildlife and wildlife habitat through careful siting of Facility components. Whenever possible, Facility components have been sited on agricultural land, thus avoiding significant impacts to high-value and sensitive habitats. Approximately 0.5 acres of interior forest within the Facility Site will be cleared beyond the fence line around panel arrays, and approximately 1.3 acres of interior forest will be converted to forest edge habitat throughout the Facility Site. However, the majority of the interior forest within the Facility Site will not be impacted, and ecologically valuable communities within the Study Area will be largely protected from disturbance. Facility access roads will be sited on existing roads and farm lanes wherever possible, and areas of disturbance will be confined to the smallest practicable area.

The following are specific examples of careful siting of Facility components to avoid and minimize forest impacts (parcel locations are depicted on Exhibit 4 Figure 4-2):

- **Parcels 87.004-1-21.121, 88.003-1-3.1, 87.004-2-2, and 88.003-1:** Facility components were sited to completely avoid a contiguous forested area adjacent to Array A.
- **Parcel 88.003-1-28:** PV Panels in Array E were sited to minimize tree clearing at the edges of a large contiguous forested area along Church Brook.

Alternative technologies will be employed to avoid and minimize clearing and earthmoving activities within wetlands, their adjacent areas, and their associated vegetation, thereby reducing resultant impacts to associated wildlife and wildlife habitat. These include the use of trenchless technologies to install collection lines under one state-regulated stream (W401) and selective tree removal methods that minimize soil disturbance and retain the existing root biomass and seed bank (e.g., tree cutting using manual methods and/or the use of timber matting during mechanical tree removal). See Exhibit 14 Wetlands for further discussion.

RRSEC will adhere to the Uniform Standards and Conditions outlined in Table 11.3-1 to further avoid and minimize impacts to wildlife and wildlife habitat during construction, including the requirement that all construction activity be limited to the designated LOD and minimizing tree and vegetation clearing for Facility construction and operations.

## 11.7 UNIFORM STANDARDS AND CONDITIONS

Table 11.7-1 identifies the applicable Uniform Standards and Conditions for this exhibit.

**Table 11.7-1 Applicable Uniform Standards and Conditions for Terrestrial Ecology**

<b>Citation</b>	<b>Uniform Standards and Conditions</b>
§900-6.4 (b)	<p data-bbox="492 285 1049 317">Environmental and Agricultural Monitoring.</p> <p data-bbox="492 363 1414 562">(1) The permittee shall hire an independent, third-party environmental monitor to oversee compliance with environmental commitments and siting permit requirements. The environmental monitor shall perform regular site inspections of construction work sites and, in consultation with the NYS DPS, issue regular reporting and compliance audits.</p> <p data-bbox="492 609 1414 764">(2) The environmental monitor shall have stop work authority over all aspects of the facility. Any stop work orders shall be limited to affected areas of the facility. Copies of the reporting and compliance audits shall be provided to the host town(s) upon request.</p> <p data-bbox="492 810 1414 924">(3) The permittee shall identify and provide qualifications and contact information for the independent, third-party environmental monitor to the NYS DPS, with a copy to the Office.</p> <p data-bbox="492 970 1414 1083">(4) If the environmental monitor is not qualified, the permittee shall also retain an independent, third-party agriculture-specific environmental monitor as required in section 900-6.4(s) of this Part.</p> <p data-bbox="492 1129 1414 1455">(5) The permittee shall ensure that its environmental monitor and agricultural monitor are equipped with sufficient access to documentation, transportation, and communication equipment to effectively monitor the permittee’s contractor’s compliance with the provisions of the siting permit with respect to such permittee’s facility components and to applicable sections of the Public Service Law, Executive Law, Environmental Conservation Law (ECL), and Clean Water Act Section 401 Water Quality Certification.</p>

**Table 11.7-1 Applicable Uniform Standards and Conditions for Terrestrial Ecology**

<b>Citation</b>	<b>Uniform Standards and Conditions</b>
§900-6.4 (e)	<p>Flagging. At least two (2) weeks before tree clearing or ground disturbing activities, the permittee shall stake or flag the planned limits of disturbance (LOD), the boundaries of any delineated NYS-regulated wetlands, waterbodies or streams in the LOD (as identified in the delineations prepared pursuant to sections 900-1.3(e) and (f) of this Part), and any known archeological sites identified in the approved Cultural Resources Avoidance, Minimization and Mitigation Plan required in section 900-10.2(g) of this Part, all on or off ROW access roads, limits of clearing and other areas needed for construction, including, but not limited to, turbine or solar array work areas, proposed infiltration areas for post-construction stormwater management, and laydown and storage areas. In addition, archeological sites shall be surrounded with construction fencing and a sign stating restricted access.</p>
§900-6.4 (m)	<p>General Environmental Requirements.</p> <p>(1) Limits of Disturbance (LOD). Construction shall not directly disturb areas outside the construction limits shown on the design drawings.</p> <p>(4) E&amp;S Materials. Permanent erosion control fabric or netting used to stabilize soils prior to establishment of vegetative cover or other permanent measures shall be one hundred (100) percent biodegradable natural product, excluding silt fence. Use of hay for erosion control or other construction-related purposes is prohibited to minimize the risk of introduction of invasive plant species.</p> <p>(5) Spill Kits. All construction vehicles and equipment shall be equipped with a spill kit. All equipment shall be inspected daily for leaks of petroleum, other fluids, or contaminants; equipment may only enter a stream channel if found to be free of any leakage. Any leaks shall be stopped and cleaned up immediately. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the NYSDEC’s Spill Hotline within two (2) hours, in accordance with the NYSDEC Spill Reporting and Initial Notification Requirements Technical Field Guidance (see section 900-15.1(i)(1)(iii) of this Part). The Office and the NYSDPS shall also be notified of all reported spills in a timely manner.</p>

**Table 11.7-1 Applicable Uniform Standards and Conditions for Terrestrial Ecology**

Citation	Uniform Standards and Conditions
	<p>(6) Construction Debris. Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying of construction debris or excess construction materials is allowed.</p> <p>(7) Clearing Areas. Tree and vegetation clearing shall be limited to the minimum necessary for facility construction and operation, and as detailed on final construction plans.</p> <p>(8) Clearing Methods. When conducting clearing, the permittee shall: (i) Comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control, and ECL Section 9-1303 and any quarantine orders issued thereunder; (ii) Not create a maximum wood chip depth greater than three (3) inches, except for chip roads (if applicable), nor store or dispose wood chips in wetlands, within stream banks, delineated floodways, or active agricultural fields; (iii) Not dispose of vegetation or slash by burning anywhere or burying within a wetland or adjacent area; and (iv) Coordinate with landowners to salvage merchantable logs and fuel wood. Where merchantable logs and fuel wood will not be removed from the Facility Site during clearing activities, final construction plans shall indicate locations of stockpiles to be established for removal from site or future landowner resource recovery.</p> <p>(9) Invasive Insects. To control the spread of invasive insects, the permittee shall provide training for clearing and construction crews to identify the Asian Longhorn Beetle and the Emerald Ash Borer and other invasive insects of concern as a potential problem at the Facility Site. If these insects are found, they shall be reported to the NYSDEC as soon as practicable.</p>

---

## 11.8 REFERENCES

- Bannerman, S. 1998. Biodiversity and Interior Habitats: The Need to Minimize Edge Effects; Part 6 of 7. British Columbia Ministry of Forests, Forest Science Program, Extension Note 21. Accessed online at: <https://www.for.gov.bc.ca/hfd/pubs/docs/en/en21.pdf>. Accessed in September 2020.
- eBird. 2020. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available at: <http://www.ebird.org>. Accessed on September 30, 2022.

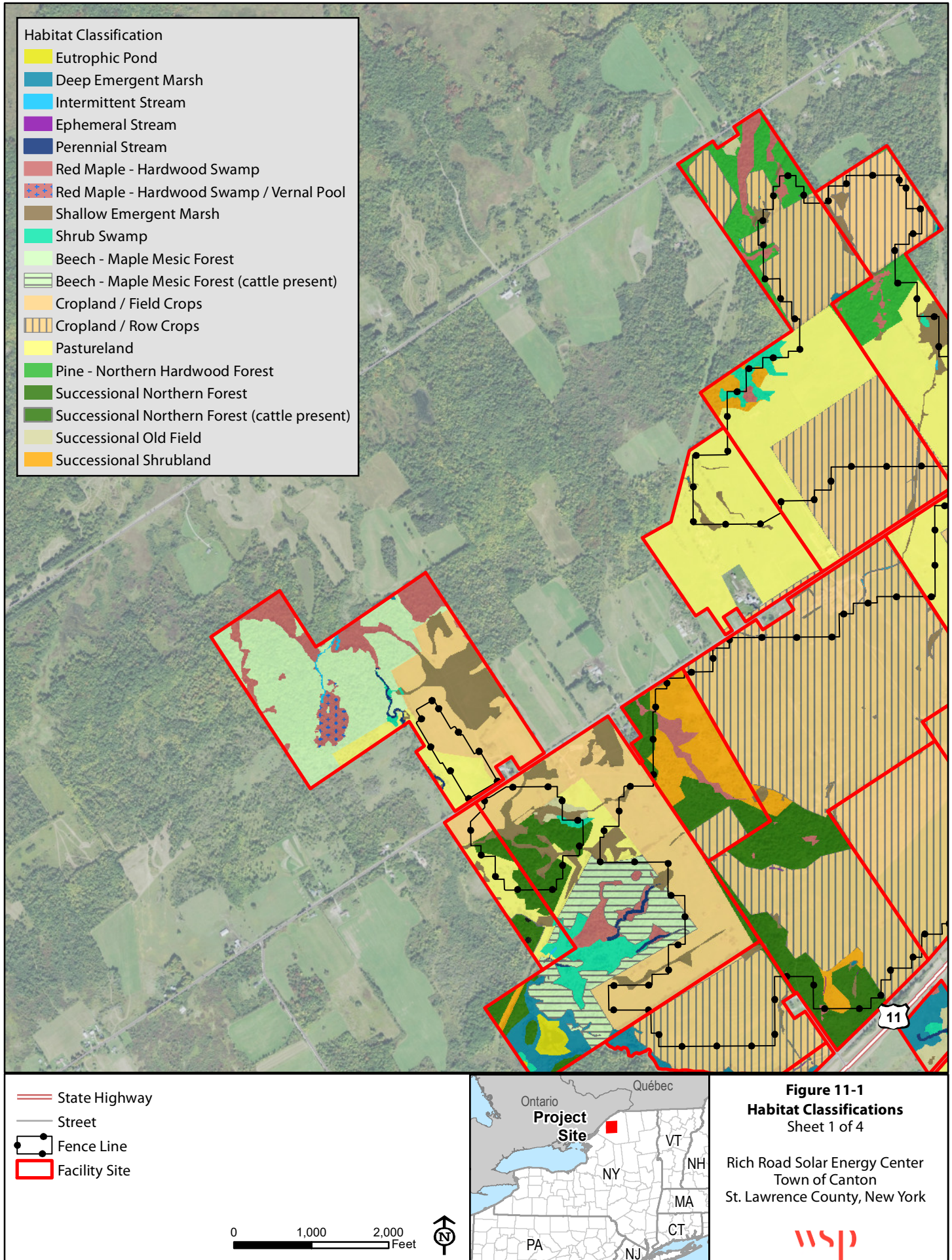
- Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. *Ecological Communities of New York State*. Second Edition. A revised and expanded edition of Carol Reschke's *Ecological Communities of New York State*. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, New York.
- Gehlhausen, S.M., M.W. Schwartz, and C.K. Augspurger. 2000. Vegetation and microclimatic edge effects in two mixed-mesophytic forest fragments. *Plant Ecology* 147: 21-35.U.S. Geological Survey. 2016. National Land Cover Dataset.
- International Union for Conservation of Nature (IUCN). 2021. The IUCN Red List of Threatened Species. Version 2021-1. Accessed online at: <https://www.iucnredlist.org>. Accessed on August 18, 2022.
- Morgan, M. and M. Burger. A Plan for Conserving Grassland Birds in New York: Final Report to the New York State Department of Environmental Conservation. Prepared by Audubon New York. 10 June 2008. Access online at: [https://ny.audubon.org/sites/default/files/conservation\\_plan\\_for\\_grassland\\_birds\\_in\\_ny.compressed.pdf](https://ny.audubon.org/sites/default/files/conservation_plan_for_grassland_birds_in_ny.compressed.pdf). Accessed on October 31, 2022.
- The Nature Conservancy (TNC) Eastern Conservation Science. 2012. Matrix Forest Blocks and Linkages. Access online at: <https://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1261>. Accessed on December 5, 2022.
- New York State Department of Environmental Conservation (NYSDEC). 2019. Checklist of the Amphibians, Reptiles, Birds and Mammals of New York, Including Their Protective Status. Tenth Revision. Division of Fish and Wildlife. Wildlife Diversity Group.
- NYSDEC. 2020a. Environmental Resource Mapper (ERM). Accessed online at: <https://gis-services.dec.ny.gov/gis/erm/>. Accessed on September 30, 2022.
- NYSDEC. 2020b. New York Nature Explorer, User Defined Results Report. Accessed online at: <http://www.dec.ny.gov/natureexplorer/>. Accessed on September 30, 2022.
- NYSDEC. 2020c. New York Breeding Bird Atlas III. Data hosted through an eBird portal. Accessed online at: <https://ebird.org/atlasny/>. Accessed on September 30, 2022.
- NYSDEC. 2021d. The Third Atlas of Breeding Birds in New York State [Online]. Atlas III data hosted through an eBird portal. Accessed online at: <https://ebird.org/atlasny/>. Accessed on February 10, 2021.
- The Trust for Public Land and Ducks Unlimited (TFPL and DU). 2020. National Conservation Easement Database (NCED) Mapping Application. Accessed online at: <https://www.conservationeasement.us/interactivemap/>. Accessed on September 30, 2022.
- Ueda, K. 2021. iNaturalist Research-grade Observations. iNaturalist.org. Occurrence dataset <https://doi.org/10.15468/ab3s5x> accessed via GBIF.org on 2021-08-25.



U.S. Fish and Wildlife Service (USFWS). 2020. Information for Planning and Consultation (IPaC). Accessed online at: <https://ecos.fws.gov/ipac/location/index>. Accessed on September 30, 2022.

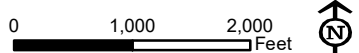
U.S. Geological Survey (USGS). 2019. Dataset - NLCD 2016 Land Cover Conterminous United States. Accessed online at: [https://www.mrlc.gov/downloads/sci-web1/shared/mrlc/metadata/NLCD\\_2016\\_Land\\_Cover\\_L48.xml](https://www.mrlc.gov/downloads/sci-web1/shared/mrlc/metadata/NLCD_2016_Land_Cover_L48.xml). Accessed on September 30, 2022.

## Appendix 11-A Figures



- Habitat Classification**
- Eutrophic Pond
  - Deep Emergent Marsh
  - Intermittent Stream
  - Ephemeral Stream
  - Perennial Stream
  - Red Maple - Hardwood Swamp
  - Red Maple - Hardwood Swamp / Vernal Pool
  - Shallow Emergent Marsh
  - Shrub Swamp
  - Beech - Maple Mesic Forest
  - Beech - Maple Mesic Forest (cattle present)
  - Cropland / Field Crops
  - Cropland / Row Crops
  - Pastureland
  - Pine - Northern Hardwood Forest
  - Successional Northern Forest
  - Successional Northern Forest (cattle present)
  - Successional Old Field
  - Successional Shrubland

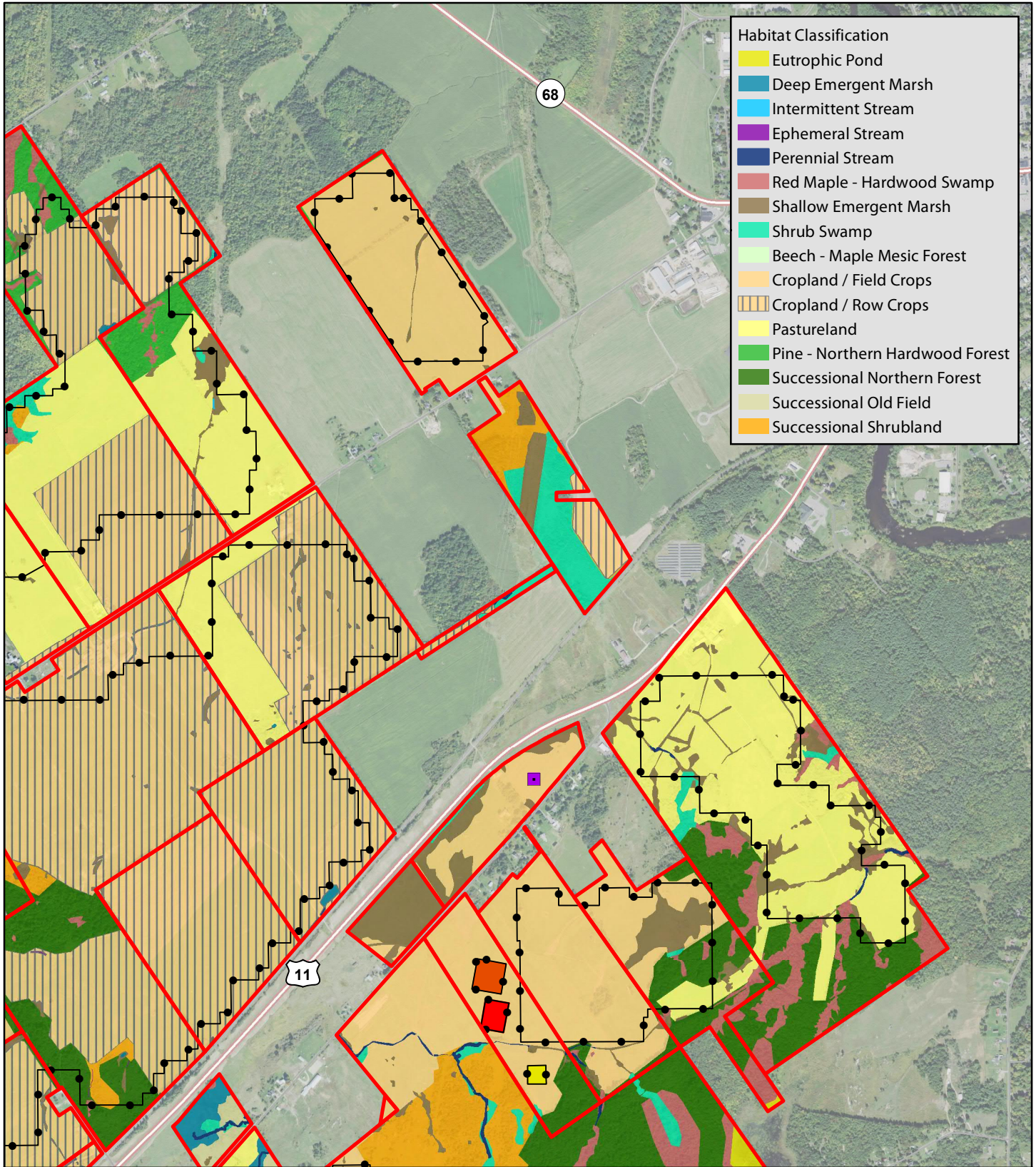
- State Highway
- Street
- Fence Line
- Facility Site



**Figure 11-1  
 Habitat Classifications**  
 Sheet 1 of 4

Rich Road Solar Energy Center  
 Town of Canton  
 St. Lawrence County, New York





- Habitat Classification**
- Eutrophic Pond
  - Deep Emergent Marsh
  - Intermittent Stream
  - Ephemeral Stream
  - Perennial Stream
  - Red Maple - Hardwood Swamp
  - Shallow Emergent Marsh
  - Shrub Swamp
  - Beech - Maple Mesic Forest
  - Cropland / Field Crops
  - Cropland / Row Crops
  - Pastureland
  - Pine - Northern Hardwood Forest
  - Successional Northern Forest
  - Successional Old Field
  - Successional Shrubland

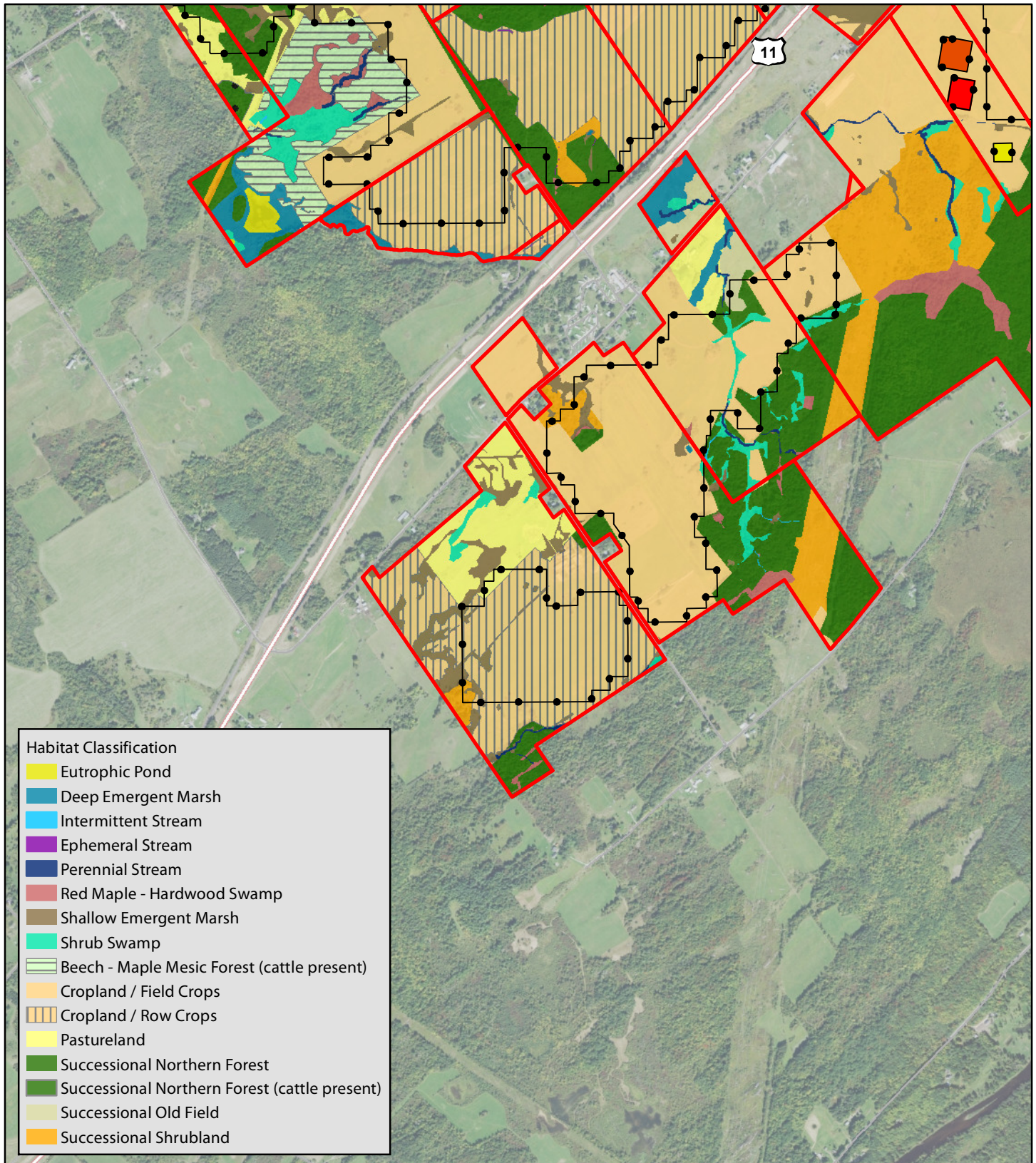
State Highway	Collection Substation
Street	Facility Site
Fence Line	
O&M Building	
BESS	
Switchyard Station	

0      1,000      2,000  
 Feet



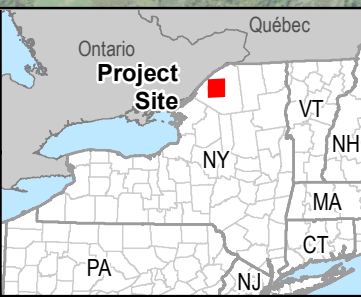
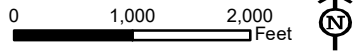
**Figure 11-1**  
**Habitat Classifications**  
 Sheet 2 of 4

Rich Road Solar Energy Center  
 Town of Canton  
 St. Lawrence County, New York



- Habitat Classification**
- Eutrophic Pond
  - Deep Emergent Marsh
  - Intermittent Stream
  - Ephemeral Stream
  - Perennial Stream
  - Red Maple - Hardwood Swamp
  - Shallow Emergent Marsh
  - Shrub Swamp
  - Beech - Maple Mesic Forest (cattle present)
  - Cropland / Field Crops
  - Cropland / Row Crops
  - Pastureland
  - Successional Northern Forest
  - Successional Northern Forest (cattle present)
  - Successional Old Field
  - Successional Shrubland

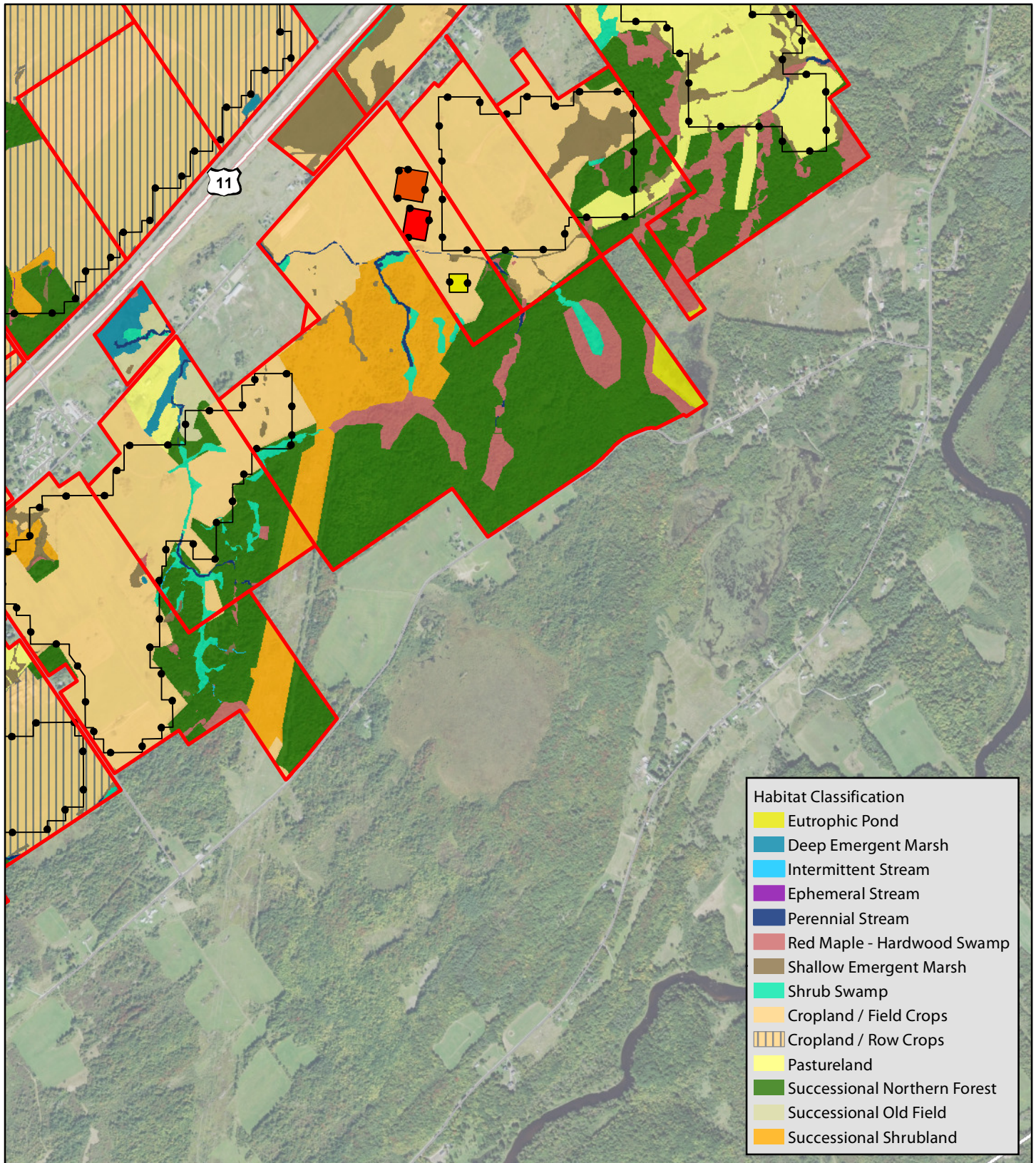
- State Highway
- Collection Substation
- Street
- Facility Site
- Fence Line
- BESS
- Switchyard Station



**Figure 11-1  
 Habitat Classifications**  
 Sheet 3 of 4

Rich Road Solar Energy Center  
 Town of Canton  
 St. Lawrence County, New York

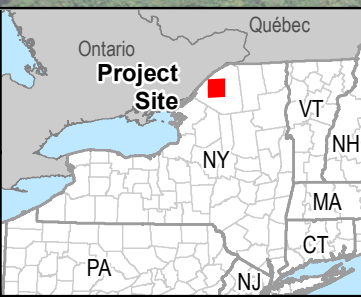
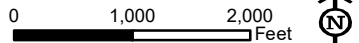




**Habitat Classification**

- Eutrophic Pond
- Deep Emergent Marsh
- Intermittent Stream
- Ephemeral Stream
- Perennial Stream
- Red Maple - Hardwood Swamp
- Shallow Emergent Marsh
- Shrub Swamp
- Cropland / Field Crops
- Cropland / Row Crops
- Pastureland
- Successional Northern Forest
- Successional Old Field
- Successional Shrubland

- State Highway
- County Route
- Street
- Fence Line
- BESS
- Switchyard Station
- Collection Substation
- Facility Site



**Figure 11-1**  
**Habitat Classifications**  
 Sheet 4 of 4

Rich Road Solar Energy Center  
 Town of Canton  
 St. Lawrence County, New York

**Appendix 11-B**  
**Wildlife Species Potentially Present within the Study Area**

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<b>Birds</b>			
<u>Ducks, Geese and Waterfowl</u>	<i>Anatidae</i>		
Snow Goose	<i>Chen caerulescens</i>	NL	Appendix 12-B Wintering Grassland Raptor Survey
Canada Goose	<i>Branta canadensis</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Trumpeter Swan	<i>Cygnus buccinator</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Wood Duck	<i>Aix sponsa</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Gadwall	<i>Mareca strepera</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Mallard	<i>Anas platyrhynchos</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
American Black Duck	<i>Anas rubripes</i>	SGCN - HP	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Green-winged Teal	<i>Anas carolinensis</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Ring-necked Duck	<i>Aythya collaris</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Common Goldeneye	<i>Bucephala clangula</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Hooded Merganser	<i>Lophodytes cucullatus</i>	NL	Nature Explorer
Common Merganser	<i>Mergus merganser</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Red-breasted Merganser	<i>Mergus serrator</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Blue-winged Teal	<i>Spatula discors</i>	NL	Nature Explorer



**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<u>Pheasants, Grouse, Allies</u>	<u>Phasianidae</u>		
Ring-necked Pheasant	<i>Phasianus colchicus</i>	NL	Nature Explorer
Ruffed Grouse	<i>Bonasa umbellus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Wild Turkey	<i>Meleagris gallopavo</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
<u>Grebes</u>	<u>Podicipedidae</u>		
Pied-billed Grebe	<i>Podilymbus podiceps</i>	ST	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
<u>Pigeons, Doves</u>	<u>Columbidae</u>		
Rock Pigeon	<i>Columba livia</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Mourning Dove	<i>Zenaida macroura</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
<u>Cuckoos</u>	<u>Cuculidae</u>		
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	NL	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
<u>Nightbirds</u>	<u>Caprimulgidae</u>		
Common Nighthawk	<i>Chordeiles minor</i>	SSC	Nature Explorer
Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	SSC	Appendix 12-A Wildlife Site Characterization Report
<u>Swifts</u>	<u>Apodidae</u>		
Chimney Swift	<i>Chaetura pelagica</i>	NL	Nature Explorer
<u>Hummingbirds</u>	<u>Trochilidae</u>		
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<u>Rails, Gallinules, and Coots</u>	<u>Rallidae</u>		
Virginia Rail	<i>Rallus limicola</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Sora	<i>Porzana carolina</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
American Coot	<i>Fulica americana</i>	NL	Nature Explorer
<u>Cranes</u>	<u>Gruidae</u>		
Sandhill Crane	<i>Grus canadensis</i>	NL	Appendix 12-A Wildlife Site Characterization Report
<u>Plovers</u>	<u>Charadriidae</u>		
Killdeer	<i>Charadrius vociferus</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
American Golden Plover	<i>Pluvialis dominica</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Lesser Yellowlegs	<i>Tringa flavipes</i>	NL	Appendix 12-A Wildlife Site Characterization Report
<u>Sandpipers</u>	<u>Scolopacidae</u>		
Upland Sandpiper	<i>Bartramia longicauda</i>	ST	Nature Explorer
American Woodcock	<i>Scolopax minor</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Wilson's Snipe	<i>Gallinago delicata</i>	NL	Nature Explorer
Spotted Sandpiper	<i>Actitis macularius</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Buff-breasted Sandpiper	<i>Calidris subruficollis</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Semipalmated Sandpiper	<i>Caladris pusilla</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Short-billed Dowitcher	<i>Limnodromus griseus</i>	NL	Appendix 12-A Wildlife Site Characterization Report

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<u>Gulls, Terns</u> <u>Laridae</u>			
Ring-billed Gull	<i>Larus delawarensis</i>	NL	Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Herring Gull	<i>Larus argentatus</i>	NL	Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Great Black-backed Gull	<i>Larus marinus</i>	NL	Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey
Black Tern	<i>Chlidonias niger</i>	SE	Appendix 12-A Wildlife Site Characterization Report
Common Tern	<i>Sterna hirundo</i>	ST	Appendix 12-A Wildlife Site Characterization Report
<u>Loons</u> <u>Gaviidae</u>			
Common Loon	<i>Gavia immer</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
<u>Hérons, Bitterns</u> <u>Ardeidae</u>			
American Bittern	<i>Botaurus lentiginosus</i>	SSC	Nature Explorer
Least Bittern	<i>Ixobrychus exilis</i>	ST	Nature Explorer
Great Blue Heron	<i>Ardea herodias</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey
Green Heron	<i>Butorides virescens</i>	NL	Nature Explorer
<u>American Vultures</u> <u>Cathartidae</u>			
Turkey Vulture	<i>Cathartes aura</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
<u>Hawks</u> <u>Accipitridae</u>			
Osprey	<i>Pandion haliaetus</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Bald Eagle	<i>Haliaeetus leucocephalus</i>	ST	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Northern Harrier	<i>Circus hudsonius</i>	ST	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Sharp-shinned Hawk	<i>Accipiter striatus</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Cooper's Hawk	<i>Accipiter cooperii</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey
Northern Goshawk	<i>Accipiter gentilis</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey
Red-shouldered Hawk	<i>Buteo lineatus</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Broad-winged Hawk	<i>Buteo platypterus</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Red-tailed Hawk	<i>Buteo jamaicensis</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Rough-legged Hawk	<i>Buteo lagopus</i>	NL	Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey
Golden Eagle	<i>Aquila chrysaetos</i>	SE	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report
<b>Owls</b>	<b><i>Strigidae</i></b>		
Barn Owl	<i>Tyto alba</i>	SGCN - HP	Nature Explorer
Eastern Screech-Owl	<i>Megascops asio</i>	NL	Nature Explorer
Great Horned Owl	<i>Bubo virginianus</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey
Barred Owl	<i>Strix varia</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey
Long-eared Owl	<i>Asio otus</i>	NL	Nature Explorer
Snowy Owl	<i>Bubo scandiacus</i>	SSC	Appendix 12-A Wildlife Site Characterization Report
Short-eared Owl	<i>Asio flammeus</i>	SE	Appendix 12-A Wildlife Site Characterization Report

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<u>Kingfishers</u>	<u>Alcedinidae</u>		
Belted Kingfisher	<i>Megaceryle alcyon</i>	NL	Nature Explorer
<u>Woodpeckers</u>	<u>Picidae</u>		
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	SSC	Nature Explorer
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	NL	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Downy Woodpecker	<i>Picoides pubescens</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Hairy Woodpecker	<i>Picoides villosus</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey
Northern Flicker	<i>Colaptes auratus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Pileated Woodpecker	<i>Dryocopus pileatus</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey
<u>Falcons</u>	<u>Falconidae</u>		
American Kestrel	<i>Falco sparverius</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Merlin	<i>Falco columbarius</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Peregrine Falcon	<i>Falco peregrinus</i>	SE	Appendix 12-A Wildlife Site Characterization Report
<u>Tyrant Flycatchers</u>	<u>Tyrannidae</u>		
Eastern Wood-Pewee	<i>Contopus virens</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Acadian Flycatcher	<i>Empidonax virescens</i>	NL	Appendix 12-A Wildlife Site Characterization Report

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Alder Flycatcher	<i>Empidonax alnorum</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Willow Flycatcher	<i>Empidonax traillii</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Least Flycatcher	<i>Empidonax minimus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Eastern Phoebe	<i>Sayornis phoebe</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Eastern Kingbird	<i>Tyrannus tyrannus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
<u>Vireos</u>	<u>Vireonidae</u>		
Yellow-throated Vireo	<i>Vireo flavifrons</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Blue-headed Vireo	<i>Vireo solitarius</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Warbling Vireo	<i>Vireo gilvus</i>	NL	Nature Explorer
Red-eyed Vireo	<i>Vireo olivaceus</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Philadelphia Vireo	<i>Vireo philadelphicus</i>	NL	Nature Explorer
<u>Shrikes</u>	<u>Laniidae</u>		
Northern Shrike	<i>Lanius excubitor</i>	NL	Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey
Loggerhead Shrike	<i>Lanius ludovicianus</i>	SE	NYSDEC Wildlife Diversity Group, IUCN
<u>Jays, Crows</u>	<u>Corvidae</u>		
Blue Jay	<i>Cyanocitta cristata</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
American Crow	<i>Corvus brachyrhynchos</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Common Raven	<i>Corvus corax</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
<u>Titmice</u>	<u>Paridae</u>		
Black-capped Chickadee	<i>Poecile atricapillus</i>	NL	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Tufted Titmouse	<i>Baeolophus bicolor</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
<u>Larks</u>	<u>Alaudidae</u>		
Horned Lark	<i>Eremophila alpestris</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
<u>Swallows</u>	<u>Hirundinidae</u>		
Purple Martin	<i>Progne subis</i>	NL	Nature Explorer
Tree Swallow	<i>Tachycineta bicolor</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	NL	Nature Explorer
Bank Swallow	<i>Riparia</i>	NL	Nature Explorer
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	NL	Nature Explorer
Barn Swallow	<i>Hirundo rustica</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
<u>Kinglets</u>	<u>Regulidae</u>		
Golden-crowned Kinglet	<i>Regulus satrapa</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Ruby-crowned Kinglet	<i>Regulus calendula</i>	NL	NYSDEC Wildlife Diversity Group, IUCN

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<u>Nuthatches</u>	<u><i>Sittidae</i></u>		
Red-breasted Nuthatch	<i>Sitta canadensis</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
White-breasted Nuthatch	<i>Sitta carolinensis</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
<u>Treecreepers</u>	<u><i>Certhiidae</i></u>		
Brown Creeper	<i>Certhia americana</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
<u>Gnatcatchers</u>	<u><i>Poliophtilidae</i></u>		
Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>	NL	Nature Explorer
<u>Wrens</u>	<u><i>Troglodytidae</i></u>		
House Wren	<i>Troglodytes aedon</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Winter Wren	<i>Troglodytes hiemalis</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Sedge Wren	<i>Cistothorus stellaris</i>	ST	Appendix 12-A Wildlife Site Characterization Report
Marsh Wren	<i>Cistothorus palustris</i>	NL	Nature Explorer
Carolina Wren	<i>Thryothorus ludovicianus</i>	NL	Nature Explorer
<u>Starlings</u>	<u><i>Sturnidae</i></u>		
European Starling	<i>Sturnus vulgaris</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
<u>Mimic Thrushes</u>	<u><i>Mimidae</i></u>		
Gray Catbird	<i>Dumetella carolinensis</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Brown Thrasher	<i>Toxostoma rufum</i>	SGCN - HP	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Northern Mockingbird	<i>Mimus polyglottos</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey



**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<u>Thrushes and Allies</u>	<u>Turdidae</u>		
Eastern Bluebird	<i>Sialia sialis</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Veery	<i>Catharus fuscescens</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Hermit Thrush	<i>Catharus guttatus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Wood Thrush	<i>Hylocichla mustelina</i>	NL	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
American Robin	<i>Turdus migratorius</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
<u>Waxwings</u>	<u>Bombycillidae</u>		
Bohemian Waxwing	<i>Bombycilla garrulus</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Cedar Waxwing	<i>Bombycilla cedrorum</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
<u>Old World Sparrows</u>	<u>Passeridae</u>		
House Sparrow	<i>Passer domesticus</i>	NL	Nature Explorer
<u>Finches and Allies</u>	<u>Fringillidae</u>		
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
House Finch	<i>Haemorhous mexicanus</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Purple Finch	<i>Haemorhous purpureus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Hoary Redpoll	<i>Acanthis hornemanni</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Red Crossbill	<i>Loxia curvirostra</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
White-winged Crossbill	<i>Loxia leucoptera</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Pine Siskin	<i>Spinus pinus</i>	NL	Nature Explorer
American Goldfinch	<i>Spinus tristis</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
<u>New World Sparrows</u>	<u>Passerellidae</u>		
Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
American Tree Sparrow	<i>Spizella arborea</i>	NL	Appendix 12-B Wintering Grassland Raptor Survey
Chipping Sparrow	<i>Spizella passerina</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Field Sparrow	<i>Spizella pusilla</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Vesper Sparrow	<i>Pooecetes gramineus</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Savannah Sparrow	<i>Passerculus sandwichensis</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	SSC	Nature Explorer
Henslow's Sparrow	<i>Ammodramus henslowii</i>	ST	Nature Explorer
Song Sparrow	<i>Melospiza melodia</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Swamp Sparrow	<i>Melospiza georgiana</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
White-throated Sparrow	<i>Zonotrichia albicollis</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Dark-eyed Junco	<i>Junco hyemalis</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey
<u>Blackbirds</u>	<u>Icteridae</u>		
Bobolink	<i>Dolichonyx oryzivorus</i>	SGCN - HP	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Eastern Meadowlark	<i>Sturnella magna</i>	SGCN - HP	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Orchard Oriole	<i>Icterus spurius</i>	NL	Nature Explorer
Baltimore Oriole	<i>Icterus galbula</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Brown-headed Cowbird	<i>Molothrus ater</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Rusty Blackbird	<i>Euphagus carolinus</i>	SGCN - HP	IPaC, Appendix 12-A Wildlife Site Characterization Report
Common Grackle	<i>Quiscalus quiscula</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
<u>New World Warblers</u>	<u>Parulidae</u>		
Brewster's Warbler	<i>Vermivora cyanoptera x chrysoptera</i>	NL	Nature Explorer
Blackpoll Warbler	<i>Dendroica striata</i>	NL	Appendix 12-A Wildlife Site Characterization Report
Ovenbird	<i>Seiurus aurocapilla</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Worm-eating Warbler	<i>Helmitheros vermivorum</i>	NL	Nature Explorer

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Louisiana Waterthrush	<i>Parkesia motacilla</i>	NL	Nature Explorer
Northern Waterthrush	<i>Parkesia noveboracensis</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	SSC	Appendix 12-A Wildlife Site Characterization Report
Blue-winged Warbler	<i>Vermivora cyanoptera</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Black-and-white Warbler	<i>Mniotilta varia</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Nashville Warbler	<i>Oreothlypis ruficapilla</i>	NL	Nature Explorer
Mourning Warbler	<i>Geothlypis philadelphia</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Kentucky Warbler	<i>Geothlypis formosa</i>	SGCN - HP	Nature Explorer
Common Yellowthroat	<i>Geothlypis trichas</i>	NL	Nature Explorer, Appendix 12-C Breeding Bird Survey
Hooded Warbler	<i>Setophaga citrina</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
American Redstart	<i>Setophaga ruticilla</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Cerulean Warbler	<i>Setophaga cerulea</i>	SSC	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Northern Parula	<i>Setophaga americana</i>	NL	Nature Explorer
Magnolia Warbler	<i>Setophaga magnolia</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Blackburnian Warbler	<i>Setophaga fusca</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Yellow Warbler	<i>Setophaga petechia</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Black-throated Blue Warbler	<i>Setophaga caerulescens</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Pine Warbler	<i>Setophaga pinus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Yellow-rumped Warbler	<i>Setophaga coronata</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Prairie Warbler	<i>Setophaga discolor</i>	NL	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report
Canada Warbler	<i>Cardellina canadensis</i>	SGCN - HP	Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report
<u>Cardinals and Allies</u>	<u>Cardinalidae</u>		
Scarlet Tanager	<i>Piranga olivacea</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Northern Cardinal	<i>Cardinalis</i>	NL	Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
Indigo Bunting	<i>Passerina cyanea</i>	NL	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey
<b>Mammals</b>			
<u>Bats</u>			
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	NL	Nature Explorer
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	ST	Nature Explorer, Appendix 12-A Wildlife Site Characterization Report
Indiana Bat	<i>Myotis sodalis</i>	SE	Appendix 12-A Wildlife Site Characterization Report
Tri-colored Bat	<i>Perimyotis subflavus</i>	NL	Nature Explorer
Little Brown Bat	<i>Myotis lucifugus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Eastern small-footed Myotis	<i>Myotis leibii</i>	SSC	NYSDEC Wildlife Diversity Group, IUCN
Eastern Pipistrelle	<i>Pipistrellus subflavus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Big Brown Bat	<i>Eptesicus fuscus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Eastern Red Bat	<i>Lasiurus borealis</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Hoary Bat	<i>Lasiurus cinereus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
<u>Marsupials</u>			
Virginia Opossum	<i>Didelphis virginiana</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
<u>Shrews and Moles</u>			
Cinereus Shrew	<i>Sorex cinereus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
American Water Shrew	<i>Sorex palustris</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Smoky Shrew	<i>Sorex fumeus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
American Pygmy Shrew	<i>Sorex hoyi</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Northern Short-tailed Shrew	<i>Blarina brevicaudali</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Hairy-tailed Mole	<i>Parascalops breweri</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Star-nosed Mole	<i>Condylura cristata</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
<u>Canids</u>			
Coyote	<i>Canis latrans</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Red Fox	<i>Vulpes</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Gray Fox	<i>Urocyon cinereoargenteus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
<u>Bear</u>			
American Black Bear	<i>Ursus americanus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<u>Skunk</u>			
Striped Skunk	<i>Mephitis</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
<u>Raccoon</u>			
Raccoon	<i>Procyon lotor</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
<u>Mustelids</u>			
Fisher	<i>Pekania pennanti</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Ermine	<i>Mustela erminea</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Long-tailed Weasel	<i>Mustela frenata</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
American Mink	<i>Neovison vison</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
North American River Otter	<i>Lontra canadensis</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
<u>Ungulates</u>			
White-tailed Deer	<i>Odocoileus virginianus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Moose	<i>Alces americanus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
<u>Rodents</u>			
Eastern Chipmunk	<i>Tamias striatus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Woodchuck	<i>Marmota monax</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Eastern Grey Squirrel	<i>Sciurus carolinensis</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Southern Flying Squirrel	<i>Glacomys volans</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Northern Flying Squirrel	<i>Flaucomys sabrinus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
American Beaver	<i>Castor canadensis</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
North American Deermouse	<i>Peromyscus maniculatus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
White-footed Deermouse	<i>Peromyscus leucopus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Southern Red-backed Vole	<i>Myodes gapperi</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Meadow Vole	<i>Microtus pennsylvanicus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Woodland Vole	<i>Microtus pinetorum</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Common Muskrat	<i>Ondatra zibethicus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Southern Bog Lemming	<i>Synaptomys cooperi</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
House Mouse	<i>Mus musculus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Meadow Jumping Mouse	<i>Zapus hudsonius</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
Woodland Jumping Mouse	<i>Napaeozapus insignis</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
North American Porcupine	<i>Erethizon dorsata</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
<b>Rabbits and Hares</b>			
Eastern Cottontail	<i>Sylvilagus floridanus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN, iNaturalist
Snowshoe Hare	<i>Lepus americanus</i>	NL	NYSDEC Wildlife Diversity Group, IUCN
<b>Reptiles and Amphibians</b>			
<b>Snakes</b>			
Ring-necked Snake	<i>Diadophis punctatus</i>	NL	Nature Explorer
Milk Snake	<i>Lampropeltis triangulum</i>	NL	Nature Explorer
Northern Water Snake	<i>Nerodia sipedon</i>	NL	Nature Explorer
Smooth Green Snake	<i>Opheodrys vernalis</i>	NL	Nature Explorer
Dekay's Brown Snake	<i>Storeria dekayi</i>	NL	Nature Explorer



**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Red-bellied Snake	<i>Storeria occipitomaculata</i>	NL	Nature Explorer
Common Garter Snake	<i>Thamnophis sirtalis</i>	NL	Nature Explorer
<b>Turtles</b>			
Snapping Turtle	<i>Chelydra serpentina</i>	NL	Nature Explorer
Painted Turtle	<i>Chrysemys picta</i>	NL	Nature Explorer
Wood Turtle	<i>Glyptemys insculpta</i>	SSC	Nature Explorer
Blanding's Turtle	<i>Emydoidea blandingii</i>	ST	Appendix 12-A Wildlife Site Characterization Report
<b>Frogs and Toads</b>			
American Toad	<i>Anaxyrus americanus</i>	NL	Nature Explorer
Gray Treefrog	<i>Hyla versicolor</i>	NL	Nature Explorer
Bullfrog	<i>Lithobates catesbeianus</i>	NL	Nature Explorer
Green Frog	<i>Lithobates clamitans</i>	NL	Nature Explorer
Pickerel Frog	<i>Lithobates palustris</i>	NL	Nature Explorer
Northern Leopard Frog	<i>Lithobates pipiens</i>	NL	Nature Explorer
Wood Frog	<i>Lithobates sylvaticus</i>	NL	Nature Explorer
Spring Peeper	<i>Pseudacris crucifer</i>	NL	Nature Explorer
Western Chorus Frog	<i>Pseudacris triceriata</i>	NL	NYSDEC Wildlife Diversity Group,
Mink Frog	<i>Lithobates serpentrionalis</i>	NL	NYSDEC Wildlife Diversity Group,
<b>Salamanders</b>			
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	SSC	Nature Explorer
Jefferson Salamander Complex	<i>Ambystoma jeffersonianum x laterale</i>	SSC	Nature Explorer
Spotted Salamander	<i>Ambystoma maculatum</i>	NL	Nature Explorer

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Dusky Salamander	<i>Desmognathus fuscus</i>	NL	Nature Explorer
Allegheny Mountain Dusky Salamander	<i>Desmognathus ochrophaeus</i>	NL	Nature Explorer
Northern Two-lined Salamander	<i>Eurycea bislineata</i>	NL	Nature Explorer
Spring Salamander	<i>Gyrinophilus porphyriticus</i>	NL	Nature Explorer
Eastern Newt	<i>Notophthalmus viridescens</i>	NL	Nature Explorer
Redback Salamander	<i>Plethodon cinereus</i>	NL	Nature Explorer
Northern Slimy Salamander	<i>Plethodon glutinosus</i>	NL	Nature Explorer
Common Mudpuppy	<i>Necturus maculosus</i>	NL	NYSDEC Wildlife Diversity Group,
<b>Fish</b>			
Comely Shiner	<i>Notropis amoenus</i>	SGCN - HP	Nature Explorer
Bridle Shiner	<i>Notropis bifrenatus</i>	NL	Nature Explorer
Blackchin Shiner	<i>Notropis heterodon</i>	SGCN - HP	Nature Explorer
Blacknose Shiner	<i>Notropis heterolepis</i>	NL	Nature Explorer
Swallowtail Shiner	<i>Notropis procne</i>	SGCN - HP	Nature Explorer
<b>Mussels and Clams</b>			
Brook Floater	<i>Alasmidonta varicosa</i>	ST	Nature Explorer
Yellow Lampmussel	<i>Lampsilis cariosa</i>	SGCN - HP	Nature Explorer, NYNHP
Green Floater	<i>Lasmigona subviridis</i>	ST	Nature Explorer
Eastern Pearlshell	<i>Margaritifera margaritifera</i>	SGCN - HP	Nature Explorer

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
<b>Invertebrates</b>			
Alderflies, Dobsonflies, and Fishflies			
Summer Fishfly	<i>Chauliodes pectinicornis</i>	NL	iNaturalist
Spring Fishfly	<i>Chauliodes rastricornis</i>	NL	iNaturalist
<b>Beetles</b>			
Sweet Click Beetle	<i>Aeolus mellillus</i>	NL	iNaturalist
	<i>Agrilus cyanescens</i>	NL	iNaturalist
Eastern Eyed Click Beetle	<i>Alaus oculatus</i>	NL	iNaturalist
	<i>Analeptura lineola</i>	NL	iNaturalist
Dandelion Anthaxia Beetle	<i>Anthaxia inornata</i>	NL	iNaturalist
Eurasian Red-and-black Melyrid	<i>Anthocomus equestris</i>	NL	iNaturalist
	<i>Anthrenus fuscus</i>	NL	iNaturalist
Common Carpet Beetle	<i>Anthrenus scrophulariae</i>	NL	iNaturalist
Two-lined Leatherwing	<i>Atalantycha bilineata</i>	NL	iNaturalist
	<i>Atalantycha neglecta</i>	NL	iNaturalist
	<i>Bellamira scalaris</i>	NL	iNaturalist
Sumac Flea Beetle	<i>Blepharida rhois</i>	NL	iNaturalist
	<i>Calleida punctata</i>	NL	iNaturalist
Russet Alder Leaf Beetle	<i>Calligrapha alni</i>	NL	iNaturalist
	<i>Cantharis livida</i>	NL	iNaturalist
Thistle Tortoise Beetle	<i>Cassida rubiginosa</i>	NL	iNaturalist
Red-rot Decay Stag Beetle	<i>Ceruchus piceus</i>	NL	iNaturalist
Small Orange Tortoise Beetle	<i>Charidotella purpurata</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Golden Tortoise Beetle	<i>Charidotella sexpunctata</i>	NL	iNaturalist
Goldenrod Soldier Beetle	<i>Chauliognathus pensylvanicus</i>	NL	iNaturalist
Dogbane Leaf Beetle	<i>Chrysochus auratus</i>	NL	iNaturalist
Twelve-spotted Tiger Beetle	<i>Cicindela duodecimguttata</i>	NL	iNaturalist
Big Sand Tiger Beetle	<i>Cicindela formosa</i>	NL	iNaturalist
Eastern Sand Tiger Beetle	<i>Cicindela formosa generosa</i>	NL	iNaturalist
Punctured Tiger Beetle	<i>Cicindela punctulata</i>	NL	iNaturalist
Purple Tiger Beetle	<i>Cicindela purpurea</i>	NL	iNaturalist
Bronzed Tiger Beetle	<i>Cicindela repanda</i>	NL	iNaturalist
Festive Tiger Beetle	<i>Cicindela scutellaris</i>	NL	iNaturalist
LeConte's Tiger Beetle	<i>Cicindela scutellaris lecontei</i>	NL	iNaturalist
Six-spotted Tiger Beetle	<i>Cicindela sexguttata</i>	NL	iNaturalist
Seven-spotted Lady Beetle	<i>Coccinella septempunctata</i>	NL	iNaturalist
Three-banded Lady Beetle	<i>Coccinella trifasciata</i>	SGCN-HP	iNaturalist
Spotted Pink Lady Beetle	<i>Coleomegilla maculata</i>	NL	iNaturalist
Long-necked Ground Beetle	<i>Colliuris pensylvanica</i>	NL	iNaturalist
	<i>Copris fricator</i>	NL	iNaturalist
Spotted Asparagus Beetle	<i>Crioceris duodecimpunctata</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
ant-like longhorn beetle	<i>Cyrtophorus verrucosus</i>	NL	iNaturalist
Larder Beetle	<i>Dermestes lardarius</i>	NL	iNaturalist
Eastern Elderberry Borer	<i>Desmocerus palliatus</i>	NL	iNaturalist
Spotted Cucumber Beetle	<i>Diabrotica undecimpunctata</i>	NL	iNaturalist
Flat-headed Hardwood Borer	<i>Dicerca divaricata</i>	NL	iNaturalist
	<i>Dircaea liturata</i>	NL	iNaturalist
Antelope Beetle	<i>Dorcus parallelus</i>	NL	iNaturalist
Ghost Tiger Beetle	<i>Ellipsoptera lepida</i>	NL	iNaturalist
Winter Firefly	<i>Ellychnia corrusca</i>	NL	iNaturalist
Oriental Beetle	<i>Exomala orientalis</i>	NL	iNaturalist
Banded Graphisurus	<i>Graphisurus fasciatus</i>	NL	iNaturalist
Asian Lady Beetle	<i>Harmonia axyridis</i>	NL	iNaturalist
Clavate Tortoise Beetle	<i>Helocassis clavata</i>	NL	iNaturalist
Parenthesis Lady Beetle	<i>Hippodamia parenthesis</i>	NL	iNaturalist
Variiegated Lady Beetle	<i>Hippodamia variegata</i>	NL	iNaturalist
Sigil Lady Beetles	<i>Hyperaspis</i>	NL	iNaturalist
	<i>Kuschelina thoracica</i>	NL	iNaturalist
Swamp Milkweed Leaf Beetle	<i>Labidomera clivicollis</i>	NL	iNaturalist
Blunt Knapweed Flower Weevil	<i>Larinus obtusus</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Three-lined Potato Beetle	<i>Lema daturaphila</i>	NL	iNaturalist
Colorado Potato Beetle	<i>Leptinotarsa decemlineata</i>	NL	iNaturalist
Lily Leaf Beetle	<i>Lilioceris lillii</i>	NL	iNaturalist
American Rose Chafer	<i>Macroductylus subspinosus</i>	NL	iNaturalist
Red-banded Fungus Beetle	<i>Megalodacne fasciata</i>	NL	iNaturalist
	<i>Microgoes oculatus</i>	NL	iNaturalist
Goldenrod Leaf Miner Beetle	<i>Microrhopala vittata</i>	NL	iNaturalist
	<i>Molorchus bimaculatus</i>	NL	iNaturalist
Northeastern Pine Sawyer Beetle	<i>Monochamus notatus</i>	NL	iNaturalist
White-spotted Sawyer Beetle	<i>Monochamus scutellatus</i>	NL	iNaturalist
American Carrion Beetle	<i>Necrophila americana</i>	NL	iNaturalist
Pustulated Carrion Beetle	<i>Nicrophorus pustulatus</i>	NL	iNaturalist
	<i>Odontocorynus umbellae</i>	NL	iNaturalist
Hermit Flower Beetle	<i>Osmoderma eremicola</i>	NL	iNaturalist
Rough Hermit Beetle	<i>Osmoderma scabra</i>	NL	iNaturalist
Black Vine Weevil	<i>Otiorhynchus sulcatus</i>	NL	iNaturalist
	<i>Oxyporus rufipennis</i>	NL	iNaturalist
Grapevine Beetle	<i>Pelidnota punctata</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Common Eastern Firefly	<i>Photinus pyralis</i>	NL	iNaturalist
Willow Leaf Beetle	<i>Plagioderma versicolora</i>	NL	iNaturalist
Woodland Ground Beetle	<i>Poecilus lucublandus</i>	NL	iNaturalist
Green Immigrant Leaf Weevil	<i>Polydrusus formosus</i>	NL	iNaturalist
Japanese Beetle	<i>Popillia japonica</i>	NL	iNaturalist
Fourteen-spotted Lady Beetle	<i>Propylea quatuordecimpunctata</i>	NL	iNaturalist
	<i>Pseudanostirus hieroglyphicus</i>	NL	iNaturalist
Ribbed Pine Borer	<i>Rhagium inquisitor</i>	NL	iNaturalist
Common Red Soldier Beetle	<i>Rhagonycha fulva</i>	NL	iNaturalist
	<i>Scaphinotus viduus</i>	NL	iNaturalist
Big-headed Ground Beetle	<i>Scarites subterraneus</i>	NL	iNaturalist
Strangalepta Flower Longhorn Beetle	<i>Strangalepta abbreviata</i>	NL	iNaturalist
	<i>Synchroa punctata</i>	NL	iNaturalist
Red Milkweed Beetle	<i>Tetraopes tetrophthalmus</i>	NL	iNaturalist
Goldenrod Leaf Beetle	<i>Trirhabda canadensis</i>	NL	iNaturalist
Banded Longhorn Beetle	<i>Typocerus velutinus</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Butterflies and Moths			
Water Veneer	<i>Acentria ephemerella</i>	NL	iNaturalist
Distinct Quaker	<i>Achatia distincta</i>	NL	iNaturalist
Garden Webworm	<i>Achyra rantalis</i>	NL	iNaturalist
Moth			
Snowy-shouldered Acleris Moth	<i>Acleris nivisellana</i>	NL	iNaturalist
Walnut Shoot Moth	<i>Acrobasis demotella</i>	NL	iNaturalist
Dark Acrolophus	<i>Acrolophus mora</i>	NL	iNaturalist
American Dagger	<i>Acronicta americana</i>	NL	iNaturalist
Clear Dagger	<i>Acronicta clarescens</i>	NL	iNaturalist
Large Gray Dagger	<i>Acronicta insita</i>	NL	iNaturalist
Marsh Dagger	<i>Acronicta insularis</i>	NL	iNaturalist
Hesitant Dagger	<i>Acronicta modica</i>	NL	iNaturalist
North American Luna Moth	<i>Actias luna</i>	NL	iNaturalist
Juniper Conch	<i>Aethes rutilana</i>	NL	iNaturalist
Large Tabby	<i>Aglossa pinguinalis</i>	NL	iNaturalist
Unspotted Looper Moth	<i>Allagrapha aerea</i>	NL	iNaturalist
Common Roadside-Skipper	<i>Amblyscirtes vialis</i>	NL	iNaturalist
Walnut Sphinx	<i>Amorpha juglandis</i>	NL	iNaturalist
American Copper Underwing	<i>Amphipyra pyramidoides</i>	NL	iNaturalist
Yellow-spotted Webworm Moth	<i>Anageshna primordialis</i>	NL	iNaturalist



**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
White-spotted Sable	<i>Anania funebris</i>	NL	iNaturalist
Guenee's Pearl	<i>Anania tertialis</i>	NL	iNaturalist
Common Gray	<i>Anavitrinella pampinaria</i>	NL	iNaturalist
Least Skipper	<i>Ancyloxypha numitor</i>	NL	iNaturalist
Schlaeger's Fruitworm Moth	<i>Antaeotricha schlaegeri</i>	NL	iNaturalist
Polyphemus Moth	<i>Antheraea polyphemus</i>	NL	iNaturalist
Anna Tiger Moth	<i>Apantesis anna</i>	NL	iNaturalist
Virgin Tiger Moth	<i>Apantesis virgo</i>	NL	iNaturalist
Checkered Apogeshna Moth	<i>Apogeshna stenialis</i>	NL	iNaturalist
Infant Moth	<i>Archiearis infans</i>	NL	iNaturalist
Ugly-nest Caterpillar Moth	<i>Archips cerasivorana</i>	NL	iNaturalist
Short-lined Chocolate	<i>Argyrostromis anilis</i>	NL	iNaturalist
White-spotted Leafroller Moth	<i>Argyrotaenia alisellana</i>	NL	iNaturalist
Gray-banded Leafroller Moth	<i>Argyrotaenia mariana</i>	NL	iNaturalist
Yellow-winged Oak Leafroller Moth	<i>Argyrotaenia quercifoliana</i>	NL	iNaturalist
Io Moth	<i>Automeris io</i>	NL	iNaturalist
Eyed Baileya Moth	<i>Baileya ophthalmica</i>	NL	iNaturalist
Three-lined Balsa Moth	<i>Balsa tristrigella</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Bog Bibarrambla Moth	<i>Bibarrambla allenella</i>	NL	iNaturalist
Hollow-spotted Blepharomastix Moth	<i>Blepharomastix ranalis</i>	NL	iNaturalist
Meadow Fritillary	<i>Boloria bellona</i>	NL	iNaturalist
Forage Looper Moth	<i>Caenurgina erechtea</i>	NL	iNaturalist
Brown Scoopwing	<i>Calledapteryx dryopterata</i>	NL	iNaturalist
Juniper Hairstreak	<i>Callophrys gryneus</i>	NL	iNaturalist
Eastern Pine Elfin	<i>Callophrys niphon</i>	NL	iNaturalist
Hoary Elfin	<i>Callophrys polios</i>	NL	iNaturalist
Promethea Silkmoth	<i>Callosamia promethea</i>	NL	iNaturalist
Poison Ivy Leaf- miner Moth	<i>Cameraria guttifinitella</i>	NL	iNaturalist
Pale Beauty	<i>Campaea perlata</i>	NL	iNaturalist
Maple Trumpet Skeletonizer Moth	<i>Catastega aceriella</i>	NL	iNaturalist
Northern Azure	<i>Celastrina lucia</i>	NL	iNaturalist
Maple- Basswood Leafroller Moth	<i>Cenopis pettitana</i>	NL	iNaturalist
Waved Sphinx	<i>Ceratomia undulosa</i>	NL	iNaturalist
Common Wood-Nymph	<i>Cercyonis pegala</i>	NL	iNaturalist
Laughter Moth	<i>Charadra deridens</i>	NL	iNaturalist
Blackberry Looper Moth	<i>Chlorochlamys chloroleucaria</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Harris's Checkerspot	<i>Chlosyne harrisii</i>	NL	iNaturalist
Spruce Budworm Moth	<i>Choristoneura fumiferana</i>	NL	iNaturalist
Oblique-banded Leafroller Moth	<i>Choristoneura rosaceana</i>	NL	iNaturalist
Topiary Grass-veneer	<i>Chrysoteuchia topiarius</i>	NL	iNaturalist
Morbid Owlet	<i>Chytolita morbidalis</i>	NL	iNaturalist
Yellow-collared Scape Moth	<i>Cisseps fulvicollis</i>	NL	iNaturalist
Black-patched Clepsid Moth	<i>Clepsid melaleucanus</i>	NL	iNaturalist
White Triangle Tortrix	<i>Clepsid persicana</i>	NL	iNaturalist
Common Ringlet	<i>Coenonympha californica</i>	NL	iNaturalist
Clouded Sulphur	<i>Colias philodice</i>	NL	iNaturalist
Close-banded Yellowhorn Moth	<i>Colocasia propinquilinea</i>	NL	iNaturalist
Dusky Groundling	<i>Condica vecors</i>	NL	iNaturalist
Grass-veneers and Allies	<i>Crambinae</i>	NL	iNaturalist
Double-banded Grass-veneer	<i>Crambus agitatellus</i>	NL	iNaturalist
Virginia Ctenucha Moth	<i>Ctenucha virginica</i>	NL	iNaturalist
Brown-hooded Owlet	<i>Cucullia convexipennis</i>	NL	iNaturalist
Eastern Tailed-Blue	<i>Cupido comyntas</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Sweetfern Geometer Moth	<i>Cyclophora pendulinaria</i>	NL	iNaturalist
Hickory Shuckworm Moth	<i>Cydia caryana</i>	NL	iNaturalist
Filbertworm Moth	<i>Cydia latiferreana</i>	NL	iNaturalist
Monarch	<i>Danaus plexippus</i>	NL	iNaturalist
Angus' Datana Moth	<i>Datana angusii</i>	NL	iNaturalist
Yellow-necked Caterpillar Moth	<i>Datana ministra</i>	NL	iNaturalist
Lettered Sphinx	<i>Deidamia inscriptum</i>	NL	iNaturalist
	<i>Desmia</i>	NL	iNaturalist
White-spotted Brown	<i>Diastictis ventralis</i>	NL	iNaturalist
Spotted Dichomeris Moth	<i>Dichomeris punctidiscellus</i>	NL	iNaturalist
Rosy Maple Moth	<i>Dryocampa rubicunda</i>	NL	iNaturalist
Bad-wing Moth	<i>Dyspteris abortivaria</i>	NL	iNaturalist
Orange-barred Carpet Moth	<i>Dysstroma hersiliata</i>	NL	iNaturalist
Imperial Moth	<i>Eacles imperialis</i>	NL	iNaturalist
Pine Imperial Moth	<i>Eacles imperialis pini</i>	NL	iNaturalist
Locust Twig Borer Moth	<i>Ecdytolopha insiticihana</i>	NL	iNaturalist
Three-spotted Concealer	<i>Eido trimaculella</i>	NL	iNaturalist
Pondside Crambid Moth	<i>Elophila icciusalis</i>	NL	iNaturalist
Maple Spanworm Moth	<i>Ennomos magnaria</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Elm Spanworm Moth	<i>Ennomos subsignaria</i>	NL	iNaturalist
Dreamy Duskywing	<i>Erynnis icelus</i>	NL	iNaturalist
Juvenal's Duskywing	<i>Erynnis juvenalis</i>	NL	iNaturalist
Columbine Duskywing	<i>Erynnis lucilius</i>	NL	iNaturalist
Beggar Moth	<i>Eubaphe mendica</i>	NL	iNaturalist
Milkweed Tussock Moth	<i>Euchaetes egle</i>	NL	iNaturalist
Least-marked Euchlaena Moth	<i>Euchlaena irraria</i>	NL	iNaturalist
	<i>Euchlaena muzaria</i>	NL	iNaturalist
Olympia Marble	<i>Euchloe olympia</i>	SC	iNaturalist
Scalloped Sallow	<i>Eucirroedia pampina</i>	NL	iNaturalist
Spiny Oak-slug Moth	<i>Euclea delphinii</i>	NL	iNaturalist
White Pine Coneborer Moth	<i>Eucopina tocullionana</i>	NL	iNaturalist
Beautiful Wood-nymph	<i>Eudryas grata</i>	NL	iNaturalist
Pearly Wood-nymph	<i>Eudryas unio</i>	NL	iNaturalist
Powdered Geometer Moths	<i>Eufidonia</i>	NL	iNaturalist
Powder Moth	<i>Eufidonia notataria</i>	NL	iNaturalist
Pandorus Sphinx	<i>Eumorpha pandorus</i>	NL	iNaturalist
Dun Skipper	<i>Euphyes vestris</i>	NL	iNaturalist
American Sharp-angled Carpet	<i>Euphyia intermediata</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Small Pine Looper Moth	<i>Eupithecia palpata</i>	NL	iNaturalist
Curved-toothed Geometer Moth	<i>Eutrapela clemataria</i>	NL	iNaturalist
Purple-backed Cabbageworm Moth	<i>Evergestis pallidata</i>	NL	iNaturalist
Harvester	<i>Feniseca tarquinius</i>	NL	iNaturalist
Boxwood Leaf-tier Moth	<i>Galasa nigrinodis</i>	NL	iNaturalist
Yarrow Plume Moth	<i>Gillmeria pallidactyla</i>	NL	iNaturalist
	<i>Glaucolepis saccharella</i>	NL	iNaturalist
Silvery Blue	<i>Glaucopsyche lygdamus</i>	NL	iNaturalist
Chickweed Geometer Moth	<i>Haematopis grataria</i>	NL	iNaturalist
Banded Tussock Moth	<i>Halysidota tessellaris</i>	NL	iNaturalist
Clymene Moth	<i>Haploa clymene</i>	NL	iNaturalist
Grapeleaf Skeletonizer Moth	<i>Harrisina americana</i>	NL	iNaturalist
Common Spring Moth	<i>Heliomata cycladata</i>	NL	iNaturalist
Black-marked Plume Moth	<i>Hellinsia inquinatus</i>	NL	iNaturalist
Snowberry Clearwing	<i>Hemaris diffinis</i>	NL	iNaturalist
Hummingbird Clearwing	<i>Hemaris thysbe</i>	NL	iNaturalist
Indian Skipper	<i>Hesperia sassacus</i>	NL	iNaturalist
Three-spotted Phillip	<i>Heterophleps triguttaria</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Pistachio Emerald	<i>Hethemia pistasciaria</i>	NL	iNaturalist
Brown Bark Carpet Moth	<i>Horisme intestinata</i>	NL	iNaturalist
Cecropia Moth	<i>Hyalophora cecropia</i>	NL	iNaturalist
Unadorned Carpet Moth	<i>Hydrelia inornata</i>	NL	iNaturalist
Bedstraw Hawkmoth	<i>Hyles gallii</i>	NL	iNaturalist
Pine Measuringworm Moth	<i>Hypagyrtis piniata</i>	NL	iNaturalist
One-spotted Variant	<i>Hypagyrtis unipunctata</i>	NL	iNaturalist
Baltimore Snout	<i>Hypena baltimoralis</i>	NL	iNaturalist
Giant Leopard Moth	<i>Hypercompe scribonia</i>	NL	iNaturalist
Fall Webworm Moth	<i>Hyphantria cunea</i>	NL	iNaturalist
Painted Lichen Moth	<i>Hypoprepia fucosa</i>	NL	iNaturalist
Yellow-fringed Dolichomia Moth	<i>Hypsopygia olinalis</i>	NL	iNaturalist
Single-dotted Wave	<i>Idaea dimidiata</i>	NL	iNaturalist
Common Idia Moth	<i>Idia aemula</i>	NL	iNaturalist
Bent-line Gray	<i>Iridopsis larvaria</i>	NL	iNaturalist
Bridled Arches Moth	<i>Lacinipolia lorea</i>	NL	iNaturalist
Hemlock Looper Moth	<i>Lambdina fiscellaria</i>	NL	iNaturalist
Northern Pine Sphinx	<i>Lapara bombycoides</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Light-ribboned Wave	<i>Leptostales ferruminaria</i>	NL	iNaturalist
Northern Pearly-eye	<i>Lethe anhedon</i>	NL	iNaturalist
Eyed Brown	<i>Lethe eurydice</i>	NL	iNaturalist
Unarmed Wainscot	<i>Leucania inermis</i>	NL	iNaturalist
White Satin Moth	<i>Leucoma salicis</i>	NL	iNaturalist
Green Leuconycta Moth	<i>Leuconycta diptheroides</i>	NL	iNaturalist
Viceroy	<i>Limenitis archippus</i>	NL	iNaturalist
Red-spotted Admiral	<i>Limenitis arthemis</i>	NL	iNaturalist
American White Admiral	<i>Limenitis arthemis arthemis</i>	NL	iNaturalist
Double-lined Prominent	<i>Lochmaeus bilineata</i>	NL	iNaturalist
White Spring Moth	<i>Lomographa vestaliata</i>	NL	iNaturalist
Hobomok Skipper	<i>Lon hobomok</i>	NL	iNaturalist
Hickory Tussock Moth	<i>Lophocampa caryae</i>	NL	iNaturalist
Spotted Tussock Moth	<i>Lophocampa maculata</i>	NL	iNaturalist
Merrick's Pyralid Moth	<i>Loxostegopsis merrickalis</i>	NL	iNaturalist
Small Copper	<i>Lycaena phlaeas</i>	NL	iNaturalist
Black-and-yellow Lichen Moth	<i>Lycomorpha pholus</i>	NL	iNaturalist
LD Moth	<i>Lymantria dispar</i>	NL	iNaturalist
Common Angle	<i>Macaria aemulataria</i>	NL	iNaturalist



**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Red-headed Inchworm Moth	<i>Macaria bisignata</i>	NL	iNaturalist
Minor Angle	<i>Macaria minorata</i>	NL	iNaturalist
White Pine Angle	<i>Macaria pinistrobata</i>	NL	iNaturalist
Lesser Maple Spanworm Moth	<i>Macaria pustularia</i>	NL	iNaturalist
Mottled Prominent	<i>Macrurocampa marthesia</i>	NL	iNaturalist
Eastern Tent Caterpillar Moth	<i>Malacosoma americana</i>	NL	iNaturalist
Forest Tent Caterpillar Moth	<i>Malacosoma disstria</i>	NL	iNaturalist
Black-dotted Glyph	<i>Maliattha synochitis</i>	NL	iNaturalist
Dark Marathyssa Moth	<i>Marathyssa inficita</i>	NL	iNaturalist
Little Wood Satyr	<i>Megisto cymela</i>	NL	iNaturalist
Hitched Arches	<i>Melanchra adjuncta</i>	NL	iNaturalist
Zebra Caterpillar Moth	<i>Melanchra picta</i>	NL	iNaturalist
Pale Metarranthis Moth	<i>Metarranthis indeclinata</i>	NL	iNaturalist
Minor Grass- vaneer	<i>Microcrambus minor</i>	NL	iNaturalist
White-dotted Prominent	<i>Nadata gibbosa</i>	NL	iNaturalist
Large Yellow Underwing	<i>Noctua pronuba</i>	NL	iNaturalist
Mourning Cloak	<i>Nymphalis antiopa</i>	NL	iNaturalist
Compton Tortoiseshell	<i>Nymphalis l-album</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Astronomer Moth	<i>Olethreutes astrologana</i>	NL	iNaturalist
	<i>Olethreutes auricapitana</i>	NL	iNaturalist
Banded Olethreutes Moth	<i>Olethreutes fasciatana</i>	NL	iNaturalist
Woolly-backed Moth	<i>Olethreutes furfuratum</i>	NL	iNaturalist
	<i>Olethreutes quadrifidum</i>	NL	iNaturalist
White-streaked Prominent	<i>Oligocentria lignicolor</i>	NL	iNaturalist
White-marked Tussock Moth	<i>Orgyia leucostigma</i>	NL	iNaturalist
Cynical Quaker	<i>Orthodes cynica</i>	NL	iNaturalist
Splendid Palpita Moth	<i>Palpita magniferalis</i>	NL	iNaturalist
Faint-spotted Palthis Moth	<i>Palthis asopialis</i>	NL	iNaturalist
Three-lined Leafroller Moth	<i>Pandemis limitata</i>	NL	iNaturalist
Red-lined Panopoda Moth	<i>Panopoda rufimargo</i>	NL	iNaturalist
Eastern Panthea Moth	<i>Panthea furcilla</i>	NL	iNaturalist
Blinded Sphinx	<i>Paonias excaecata</i>	NL	iNaturalist
Small-eyed Sphinx	<i>Paonias myops</i>	NL	iNaturalist
Canadian Tiger Swallowtail	<i>Papilio canadensis</i>	NL	iNaturalist
Eastern Giant Swallowtail	<i>Papilio cresphontes</i>	NL	iNaturalist
Black Swallowtail	<i>Papilio polyxenes</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Spicebush Swallowtail	<i>Papilio troilus</i>	NL	iNaturalist
Maple Leafcutter Moth	<i>Paraclemensia acerifoliella</i>	NL	iNaturalist
Chestnut-marked Pondweed Moth	<i>Parapoynx badiusalis</i>	NL	iNaturalist
Obscure Pondweed Moth	<i>Parapoynx obscuralis</i>	NL	iNaturalist
Green Pug	<i>Pasiphila rectangulata</i>	NL	iNaturalist
Titian Peale's Moth	<i>Perispasta caeculalis</i>	NL	iNaturalist
Morrison's Pero Moth	<i>Pero morrisonaria</i>	NL	iNaturalist
American Oak Beauty	<i>Phaeoura quernaria</i>	NL	iNaturalist
Dark-banded Owlet	<i>Phalaenophana pyramusalis</i>	NL	iNaturalist
Small Phigalia Moth	<i>Phigalia strigataria</i>	NL	iNaturalist
Half-wing Moth	<i>Phigalia titea</i>	NL	iNaturalist
Pearl Crescent	<i>Phyciodes tharos</i>	NL	iNaturalist
	<i>Phyllocnistis vitifoliella</i>	NL	iNaturalist
American Lappet Moth	<i>Phyllodesma americana</i>	NL	iNaturalist
Basswood Miner Moth	<i>Phyllonorycter lucetiella</i>	NL	iNaturalist
Beech Midget	<i>Phyllonorycter maestingella</i>	NL	iNaturalist
Mustard White	<i>Pieris oleracea</i>	NL	iNaturalist
Cabbage White	<i>Pieris rapae</i>	NL	iNaturalist
Tufted Apple Bud Moth	<i>Platynota idaeusalis</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Common Tan Wave	<i>Pleuroprucha insulsaria</i>	NL	iNaturalist
Putnam's Looper Moth	<i>Plusia putnami</i>	NL	iNaturalist
Long Dash	<i>Polites mystic</i>	NL	iNaturalist
Peck's Skipper	<i>Polites peckius</i>	NL	iNaturalist
Tawny-edged Skipper	<i>Polites themistocles</i>	NL	iNaturalist
Eastern Comma	<i>Polygonia comma</i>	NL	iNaturalist
Question Mark	<i>Polygonia interrogationis</i>	NL	iNaturalist
Small Bird-dropping Moth	<i>Ponometia erastrioides</i>	NL	iNaturalist
Carpenterworm Moth	<i>Prionoxystus robiniae</i>	NL	iNaturalist
Friendly Probole Moth	<i>Probole amicarica</i>	NL	iNaturalist
Pale Glyph	<i>Protodeltote albidula</i>	NL	iNaturalist
Large Mossy Glyph	<i>Protodeltote muscosula</i>	NL	iNaturalist
Pink-barred Pseudeustrotia Moth	<i>Pseudeustrotia carneola</i>	NL	iNaturalist
Poplar Leafroller Moth	<i>Pseudosciaphila duplex</i>	NL	iNaturalist
Dotted Leaf-tier Moth	<i>Psilocorsis reflexella</i>	NL	iNaturalist
Isabella Tiger Moth	<i>Pyrrharctia isabella</i>	NL	iNaturalist
Spotted Grass Moth	<i>Rivula propinqualis</i>	NL	iNaturalist
Hickory Hairstreak	<i>Satyrium caryaevorus</i>	NL	iNaturalist
Morning-glory Prominent	<i>Schizura ipomaeae</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Unicorn Prominent	<i>Schizura unicornis</i>	NL	iNaturalist
Many-spotted Scoparia Moth	<i>Scoparia basalis</i>	NL	iNaturalist
Dark Brown Scoparia Moth	<i>Scoparia penumbralis</i>	NL	iNaturalist
Large Lace-border Moth	<i>Scopula limboundata</i>	NL	iNaturalist
Carrot Seed Moth	<i>Sitochroa palealis</i>	NL	iNaturalist
Six-spotted Gray	<i>Spargaloma sexpunctata</i>	NL	iNaturalist
Distinct Sparganothis Moth	<i>Sparganothis distincta</i>	NL	iNaturalist
Mosaic Sparganothis Moth	<i>Sparganothis xanthoides</i>	NL	iNaturalist
Aphrodite Fritillary	<i>Speyeria aphrodite</i>	NL	iNaturalist
Great Spangled Fritillary	<i>Speyeria cybele</i>	NL	iNaturalist
Great Ash Sphinx	<i>Sphinx chersis</i>	NL	iNaturalist
Laurel Sphinx	<i>Sphinx kalmiae</i>	NL	iNaturalist
Virginian Tiger Moth	<i>Spilosoma virginica</i>	NL	iNaturalist
	<i>Stigmella prunifoliella</i>	NL	iNaturalist
	<i>Symmerista</i>	NL	iNaturalist
Maple Callus Borer Moth	<i>Synanthedon acerni</i>	NL	iNaturalist
Triangle-marked Twirler Moth	<i>Taygete attributella</i>	NL	iNaturalist
Y-backed Telphusa	<i>Telphusa longifasciella</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
White Slant-line	<i>Tetracis cachexiata</i>	NL	iNaturalist
Yellow Slant-line	<i>Tetracis crocallata</i>	NL	iNaturalist
Bronze Copper	<i>Tharsalea hyllus</i>	NL	iNaturalist
Northern Cloudywing	<i>Thorybes pylades</i>	NL	iNaturalist
Essex Skipper	<i>Thymelicus lineola</i>	NL	iNaturalist
Birch Conch	<i>Thyraylia nana</i>	NL	iNaturalist
Large Tolype Moth	<i>Tolype vellea</i>	NL	iNaturalist
Early Button Slug Moth	<i>Tortricidia testacea</i>	NL	iNaturalist
White-striped Black	<i>Trichodezia albovittata</i>	NL	iNaturalist
Snowy Urola Moth	<i>Urola nivalis</i>	NL	iNaturalist
Red Admiral	<i>Vanessa atalanta</i>	NL	iNaturalist
Painted Lady	<i>Vanessa cardui</i>	NL	iNaturalist
American Lady	<i>Vanessa virginiensis</i>	NL	iNaturalist
Dark-barred Twin-spot Carpet	<i>Xanthorhoe ferrugata</i>	NL	iNaturalist
Crocus Geometer Moths	<i>Xanthotype</i>	NL	iNaturalist
	<i>Xestia</i>	NL	iNaturalist
Greater Black-letter Dart	<i>Xestia dolosa</i>	NL	iNaturalist
Brown-spotted Zale Moth	<i>Zale helata</i>	NL	iNaturalist
Grayish Fan-foot	<i>Zanclognatha pedipilalis</i>	NL	iNaturalist
Caddisflies			
	<i>Nectopsyche exquisita</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Cockroaches and Termites			
Pennsylvania Wood Cockroach	<i>Parcoblatta pennsylvanica</i>	NL	iNaturalist
Daddy Longlegs			
European Harvestman	<i>Phalangium opilio</i>	NL	iNaturalist
Dragonflies and Damselflies			
Canada Darner	<i>Aeshna canadensis</i>	NL	iNaturalist
Lance-tipped Darner	<i>Aeshna constricta</i>	NL	iNaturalist
Shadow Darner	<i>Aeshna umbrosa</i>	NL	iNaturalist
Common Green Darner	<i>Anax junius</i>	NL	iNaturalist
Lilypad Clubtail	<i>Arigomphus furcifer</i>	NL	iNaturalist
Springtime Darner	<i>Basiaeschna janata</i>	NL	iNaturalist
Halloween Pennant	<i>Celithemis eponina</i>	NL	iNaturalist
Aurora Damsel	<i>Chromagrion conditum</i>	NL	iNaturalist
Stream Cruiser	<i>Didymops transversa</i>	NL	iNaturalist
Racket-tailed Emerald	<i>Dorocordulia libera</i>	NL	iNaturalist
Familiar Bluet	<i>Enallagma civile</i>	NL	iNaturalist
Stream Bluet	<i>Enallagma exsulans</i>	NL	iNaturalist
Orange Bluet	<i>Enallagma signatum</i>	NL	iNaturalist
Swamp Darner	<i>Epiaeschna heros</i>	NL	iNaturalist
Beaverpond Baskettail	<i>Epitheca canis</i>	NL	iNaturalist
Common Baskettail	<i>Epitheca cynosura</i>	NL	iNaturalist
Prince Baskettail	<i>Epitheca princeps</i>	NL	iNaturalist
Spiny Baskettail	<i>Epitheca spinigera</i>	NL	iNaturalist
Eastern Pondhawk	<i>Erythemis simplicicollis</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Harlequin Darner	<i>Gomphaeschna furcillata</i>	NL	iNaturalist
Dragonhunter	<i>Hagenius brevistylus</i>	NL	iNaturalist
Fragile Forktail	<i>Ischnura posita</i>	NL	iNaturalist
Eastern Forktail	<i>Ischnura verticalis</i>	NL	iNaturalist
Chalk-fronted Corporal	<i>Ladona julia</i>	NL	iNaturalist
Spotted Spreadwing	<i>Lestes congener</i>	NL	iNaturalist
Slender Spreadwing	<i>Lestes rectangularis</i>	NL	iNaturalist
Lyre-tipped Spreadwing	<i>Lestes unguiculatus</i>	NL	Nature Explorer
Swamp Spreadwing	<i>Lestes vigilax</i>	NL	iNaturalist
Hudsonian Whiteface	<i>Leucorrhinia hudsonica</i>	NL	iNaturalist
Dot-tailed Whiteface	<i>Leucorrhinia intacta</i>	NL	iNaturalist
Slaty Skimmer	<i>Libellula incesta</i>	NL	iNaturalist
Widow Skimmer	<i>Libellula luctuosa</i>	NL	iNaturalist
Twelve-spotted Skimmer	<i>Libellula pulchella</i>	NL	iNaturalist
Four-spotted Skimmer	<i>Libellula quadrimaculata</i>	NL	iNaturalist
Painted Skimmer	<i>Libellula semifasciata</i>	NL	iNaturalist
Swift River Cruiser	<i>Macromia illinoiensis</i>	NL	iNaturalist
Elfin Skimmer	<i>Nannothemis bella</i>	NL	iNaturalist
Blue Dasher	<i>Pachydiplax longipennis</i>	NL	iNaturalist
Eastern Amberwing	<i>Perithemis tenera</i>	NL	iNaturalist



**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Common Whitetail	<i>Plathemis lydia</i>	NL	iNaturalist
Meadowhawks	<i>Sympetrum</i>	NL	iNaturalist
Autumn Meadowhawk	<i>Sympetrum vicinum</i>	NL	iNaturalist
Flies			
Woodland Pool Mosquito	<i>Aedes canadensis</i>	NL	iNaturalist
Oblique Streaktail	<i>Allograpta obliqua</i>	NL	iNaturalist
Carbonifera goldenrod gall midge	<i>Asteromyia carbonifera</i>	NL	iNaturalist
Greater Bee Fly	<i>Bombylius major</i>	NL	iNaturalist
Pygmy Bee Fly	<i>Bombylius pygmaeus</i>	NL	iNaturalist
	<i>Calycomyza flavinotum</i>	NL	iNaturalist
Ornate Snipe Fly	<i>Chrysopilus ornatus</i>	NL	iNaturalist
	<i>Chrysops geminatus</i>	NL	iNaturalist
Bathroom Moth Fly	<i>Clogmia albipunctata</i>	NL	iNaturalist
	<i>Condylostylus patibulatus</i>	NL	iNaturalist
Cattail Mosquito	<i>Coquillettidia perturbans</i>	NL	iNaturalist
	<i>Dioctria hyalipennis</i>	NL	iNaturalist
European Drone Fly	<i>Eristalis arbustorum</i>	NL	iNaturalist
Black-shouldered Drone Fly	<i>Eristalis dimidiata</i>	NL	iNaturalist
Common Drone Fly	<i>Eristalis tenax</i>	NL	iNaturalist
Tomato Bristle Fly	<i>Hystricia abrupta</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
	<i>Laphria flavicollis</i>	NL	iNaturalist
Bumble Bee Mimic Robber Fly	<i>Laphria thoracica</i>	NL	iNaturalist
Milkweed Leaf-miner Fly	<i>Liriomyza asclepiadis</i>	NL	iNaturalist
	<i>Liriomyza carphephor</i>	NL	iNaturalist
Common European Greenbottle Fly	<i>Lucilia sericata</i>	NL	iNaturalist
Hairy-eyed Bee-mimic Fly	<i>Mallota posticata</i>	NL	iNaturalist
Narcissus Bulb Fly	<i>Merodon equestris</i>	NL	iNaturalist
Beautiful Patterneye	<i>Orthonevra pulchella</i>	NL	iNaturalist
Dusky Bog Fly	<i>Parhelophilus rex</i>	NL	iNaturalist
	<i>Phytomyza loewii</i>	NL	iNaturalist
	<i>Phytomyza minuscula group</i>	NL	iNaturalist
Oak Leaf Gall Midge	<i>Polystepha pilulae</i>	NL	iNaturalist
Dark Ricefield Mosquito	<i>Psorophora columbiae</i>	NL	iNaturalist
Common Snipe Fly	<i>Rhagio mystaceus</i>	NL	iNaturalist
Black Horse Fly	<i>Tabanus atratus</i>	NL	iNaturalist
Antlered Crane Fly	<i>Tanyptera dorsalis</i>	NL	iNaturalist
Eastern Calligrapher	<i>Toxomerus geminatus</i>	NL	iNaturalist
Margined Calligrapher	<i>Toxomerus marginatus</i>	NL	iNaturalist
Swift Feather-legged Fly	<i>Trichopoda pennipes</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Four-barred Knapweed Gall Fly	<i>Urophora quadrifasciata</i>	NL	iNaturalist
Tiger Bee Fly	<i>Xenox tigrinus</i>	NL	iNaturalist
Woodland Pool Mosquito	<i>Aedes canadensis</i>	NL	iNaturalist
Grasshoppers, Locusts, and Crickets			
Davis's Shieldback	<i>Atlantiscus davisii</i>	NL	iNaturalist
Wingless Mountain Grasshopper	<i>Booneacris glacialis</i>	NL	iNaturalist
Sprinkled Locust	<i>Chloealtis conspersa</i>	NL	iNaturalist
Green-striped Grasshopper	<i>Chortophaga viridifasciata</i>	NL	iNaturalist
Northern Green-striped Grasshopper	<i>Chortophaga viridifasciata viridifasciata</i>	NL	iNaturalist
Slender Meadow Katydid	<i>Conocephalus fasciatus</i>	NL	iNaturalist
Carolina Grasshopper	<i>Dissosteira carolina</i>	NL	iNaturalist
Fall Field Cricket	<i>Gryllus pennsylvanicus</i>	NL	iNaturalist
Spring Field Cricket	<i>Gryllus veletis</i>	NL	iNaturalist
Two-striped Grasshopper	<i>Melanoplus bivittatus</i>	NL	iNaturalist
Northern Spur-throat Grasshopper	<i>Melanoplus borealis</i>	NL	iNaturalist
Huckleberry Spur-throat Grasshopper	<i>Melanoplus fasciatus</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Pine-tree Spur-throat Grasshopper	<i>Melanoplus punctulatus</i>	NL	iNaturalist
Pine Tree Cricket	<i>Oecanthus pini</i>	NL	iNaturalist
Marsh meadow grasshopper	<i>Pseudochorthippus curtipennis</i>	NL	iNaturalist
Roesel's Bush-cricket	<i>Roeseliana roeselii</i>	NL	iNaturalist
Boll's Grasshopper	<i>Spharagemon bolli</i>	NL	iNaturalist
Lacewings			
Black-horned Green Lacewing	<i>Chrysopa nigricornis</i>	NL	iNaturalist
	<i>Chrysopa oculata</i>	NL	iNaturalist
Mantises			
European Mantis	<i>Mantis religiosa</i>	NL	iNaturalist
Mayflies			
Giant Mayfly	<i>Hexagenia limbata</i>	NL	iNaturalist
Mites			
Poison Ivy Leaf Mite	<i>Aculops rhois</i>	NL	iNaturalist
Sawflies, Wasps, Bees, and Ants			
	<i>Acrotaphus wiltii</i>	NL	iNaturalist
Spongy Oak Apple Gall Wasp	<i>Amphibolips confluenta</i>	NL	iNaturalist
Oak Apple Gall Wasp	<i>Amphibolips cookii</i>	NL	iNaturalist
Translucent Oak Gall Wasp	<i>Amphibolips nubilipennis</i>	NL	iNaturalist
Acorn Plum Gall Wasp	<i>Amphibolips quercusjuglans</i>	NL	iNaturalist
Lobed Mason Wasp	<i>Ancistrocerus antilope</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Spinola's Mason Wasp	<i>Ancistrocerus spinolae</i>	NL	iNaturalist
Clark's Mining Bee	<i>Andrena clarkella</i>	NL	iNaturalist
Hairy-banded Mining Bee	<i>Andrena hirticincta</i>	NL	iNaturalist
Oblong Woolcarder Bee	<i>Anthidium oblongatum</i>	NL	iNaturalist
Orange-tipped Wood-digger Bee	<i>Anthophora terminalis</i>	NL	iNaturalist
Queen Ant Kidnapper	<i>Aphilanthops frigidus</i>	NL	iNaturalist
Western Honey Bee	<i>Apis mellifera</i>	NL	iNaturalist
Pure Green-Sweat bee	<i>Augochlora pura</i>	NL	iNaturalist
Golden Sweat Bee	<i>Augochlorella aurata</i>	NL	iNaturalist
Metallic Epauletted-Sweat bee	<i>Augochloropsis metallica</i>	NL	iNaturalist
Four-banded Stink Bug Wasp	<i>Bicyrtes quadrifasciatus</i>	NL	iNaturalist
Rusty-patched Bumble Bee	<i>Bombus affinis</i>	SGCN-HP	iNaturalist
Black-and-gold Bumble Bee	<i>Bombus auricomus</i>	NL	iNaturalist
Northern Amber Bumble Bee	<i>Bombus borealis</i>	SGCN-HP	iNaturalist
Lemon Cuckoo-Bumble bee	<i>Bombus citrinus</i>	NL	iNaturalist
Golden Northern Bumble Bee	<i>Bombus fervidus</i>	SGCN-HP	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Brown-belted Bumble Bee	<i>Bombus griseocollis</i>	NL	iNaturalist
Common Eastern Bumble Bee	<i>Bombus impatiens</i>	NL	iNaturalist
American Bumble Bee	<i>Bombus pensylvanicus</i>	SGCN-HP	iNaturalist
Tricolored Bumble Bee	<i>Bombus ternarius</i>	NL	iNaturalist
Yellow-banded Bumble Bee	<i>Bombus terricola</i>	SGCN-HP	iNaturalist
Half-black Bumble Bee	<i>Bombus vagans</i>	NL	iNaturalist
Hairless Rover Ant	<i>Brachymyrmex depilis</i>	NL	iNaturalist
New York Carpenter Ant	<i>Camponotus novaeboracensis</i>	NL	iNaturalist
Eastern Black Carpenter Ant	<i>Camponotus pennsylvanicus</i>	NL	iNaturalist
Typical Weevil Wasps and Allies	<i>Cerceris</i>	NL	iNaturalist
Smoky-winged Beetle Bandit Wasp	<i>Cerceris fumipennis</i>	NL	iNaturalist
Nearctic Blue Mud-dauber Wasp	<i>Chalybion californicum</i>	NL	iNaturalist
Steel-blue Cricket-hunter Wasp	<i>Chlorion aerarium</i>	NL	iNaturalist
	<i>Chrysis cessata</i>	NL	iNaturalist
Cherry Ant	<i>Crematogaster cerasi</i>	NL	iNaturalist
Feather-legged Scoliid Wasp	<i>Dielis plumipes</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Mossy Rose Gall Wasp	<i>Diplolepis rosae</i>	NL	iNaturalist
Common Aerial Yellowjacket	<i>Dolichovespula arenaria</i>	NL	iNaturalist
Bald-faced Hornet	<i>Dolichovespula maculata</i>	NL	iNaturalist
Fraternal Potter Wasp	<i>Eumenes fraternus</i>	NL	iNaturalist
Uncertain Field Ant	<i>Formica incerta</i>	NL	iNaturalist
Pale Field Ant	<i>Formica pallidefulva</i>	NL	iNaturalist
Blueberry Digger Bee	<i>Habropoda laboriosa</i>	NL	iNaturalist
Confusing Furrow Bee	<i>Halictus confusus</i>	NL	iNaturalist
Ligated Furrow Bee	<i>Halictus ligatus</i>	NL	iNaturalist
Orange-legged Furrow Bee	<i>Halictus rubicundus</i>	NL	iNaturalist
Produced Small-Mason	<i>Hoplitis producta</i>	NL	iNaturalist
	<i>Lasioglossum vierecki</i>	NL	iNaturalist
Shaded Fuzzy Ant	<i>Lasius aphidicola</i>	NL	iNaturalist
Smaller Yellow Ant	<i>Lasius claviger</i>	NL	iNaturalist
New World Fuzzy Ant	<i>Lasius nearcticus</i>	NL	iNaturalist
	<i>Leucospis affinis</i>	NL	iNaturalist
Broad-handed Leafcutter	<i>Megachile latimanus</i>	NL	iNaturalist
Black Giant Ichneumonid Wasp	<i>Megarhyssa atrata</i>	NL	iNaturalist
Long-tailed Giant	<i>Megarhyssa macrurus</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Ichneumonid Wasp			
Pickerelweed Long-horned Bee	<i>Melissodes apicatus</i>	NL	iNaturalist
Drury's Long-horned Bee	<i>Melissodes druriellus</i>	NL	iNaturalist
	<i>Microbembex monodonta</i>	NL	iNaturalist
Bufflehead Mason Bee	<i>Osmia bucephala</i>	NL	iNaturalist
American Pelecinid Wasp	<i>Pelecinus polyturator</i>	NL	iNaturalist
Flat-collared Beewolf	<i>Philanthus ventilabris</i>	NL	iNaturalist
European Paper Wasp	<i>Polistes dominula</i>	NL	iNaturalist
Dark Paper Wasp	<i>Polistes fuscatus</i>	NL	iNaturalist
	<i>Pseudomethoca frigida</i>	NL	iNaturalist
Yellow-legged Mud-dauber Wasp	<i>Sceliphron caementarium</i>	NL	iNaturalist
Eastern Cicada-killer Wasp	<i>Sphecius speciosus</i>	NL	iNaturalist
Great Black Digger Wasp	<i>Sphex pensylvanicus</i>	NL	iNaturalist
Vampire Ant	<i>Stigmatomma pallipes</i>	NL	iNaturalist
Immigrant Pavement Ant	<i>Tetramorium immigrans</i>	NL	iNaturalist
	<i>Timulla vagans</i>	NL	iNaturalist
Pigeon Horntail	<i>Tremex columba</i>	NL	iNaturalist
European Hornet	<i>Vespa crabro</i>	NL	iNaturalist



**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Downy Yellowjacket	<i>Vespula flavopilosa</i>	NL	iNaturalist
German Yellowjacket	<i>Vespula germanica</i>	NL	iNaturalist
Eastern Yellowjacket	<i>Vespula maculifrons</i>	NL	iNaturalist
Widow Yellowjacket	<i>Vespula vidua</i>	NL	iNaturalist
Eastern Carpenter Bee	<i>Xylocopa virginica</i>	NL	iNaturalist
Snails and Slugs			
Northern Walkingstick	<i>Diaperomera femorata</i>	NL	iNaturalist
Hedgehog Slug	<i>Arion intermedius</i>	NL	iNaturalist
Western Dusky Slug	<i>Arion subfuscus</i>	NL	iNaturalist
Brown-lipped Snail	<i>Cepaea nemoralis</i>	NL	iNaturalist
Leopard Slug	<i>Limax maximus</i>	NL	iNaturalist
Spiders			
Grass Spiders	<i>Agelenopsis</i>	NL	iNaturalist
Cross Orbweaver	<i>Araneus diadematus</i>	NL	iNaturalist
Marbled Orbweaver	<i>Araneus marmoreus</i>	NL	iNaturalist
Shamrock Orbweaver	<i>Araneus trifolium</i>	NL	iNaturalist
Six-spotted Orbweaver	<i>Araniella displicata</i>	NL	iNaturalist
Yellow Garden Spider	<i>Argiope aurantia</i>	NL	iNaturalist
Banded Garden Spider	<i>Argiope trifasciata</i>	NL	iNaturalist
Asiatic Wall Jumping Spider	<i>Attulus fasciger</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Dark Fishing Spider	<i>Dolomedes tenebrosus</i>	NL	iNaturalist
Six-spotted Fishing Spider	<i>Dolomedes triton</i>	NL	iNaturalist
Common candy-striped spider	<i>Enoplognatha ovata</i>	NL	iNaturalist
Hoy's Jumping Spider	<i>Evarcha hoyi</i>	NL	iNaturalist
Boreal Paradise Spider	<i>Habronattus borealis</i>	NL	iNaturalist
Maddison's Jumping Spider	<i>Habronattus calcaratus maddisoni</i>	NL	iNaturalist
	<i>Habronattus decorus</i>	NL	iNaturalist
Eastern Parson Spider	<i>Herpyllus ecclesiasticus</i>	NL	iNaturalist
Furrow Orbweaver	<i>Larinioides cornutus</i>	NL	iNaturalist
Grey Cross Spider	<i>Larinioides sclopetarius</i>	NL	iNaturalist
Tuft-legged Orbweaver	<i>Mangora placida</i>	NL	iNaturalist
Eastern Cave Long-jawed Spider	<i>Meta ovalis</i>	NL	iNaturalist
Goldenrod Crab Spider	<i>Misumena vatia</i>	NL	iNaturalist
flea jumping spider	<i>Naphrys pulex</i>	NL	iNaturalist
Common White-cheeked Jumping Spider	<i>Pelegrina proterva</i>	NL	iNaturalist
Bold Jumping Spider	<i>Phidippus audax</i>	NL	iNaturalist
Brilliant Jumping Spider	<i>Phidippus clarus</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Marbled Purple Jumping Spider	<i>Phidippus purpuratus</i>	NL	iNaturalist
American Nursery Web Spider	<i>Pisaurina mira</i>	NL	iNaturalist
Zebra Jumping Spider	<i>Salticus scenicus</i>	NL	iNaturalist
Black Purseweb Spider	<i>Sphodros niger</i>	NL	iNaturalist
False Widow Spiders	<i>Steatoda</i>	NL	iNaturalist
Triangulate Combfoot	<i>Steatoda triangulosa</i>	NL	iNaturalist
Broad-Faced Sac Spider	<i>Trachelas tranquillus</i>	NL	iNaturalist
Hart's Jumping Spider	<i>Tutelina harti</i>	NL	iNaturalist
Featherlegged Orbweaver	<i>Uloborus glomosus</i>	NL	iNaturalist
Ticks			
American Dog Tick	<i>Dermacentor variabilis</i>	NL	iNaturalist
Eastern Black-legged Tick	<i>Ixodes scapularis</i>	NL	iNaturalist
True Bugs			
Two-striped Planthopper	<i>Acanalonia bivittata</i>	NL	iNaturalist
	<i>Acanthocephala terminalis</i>	NL	iNaturalist
	<i>Atymna querci</i>	NL	iNaturalist
Chinch Bug	<i>Blissus leucopterus</i>	NL	iNaturalist
Eastern Boxelder Bug	<i>Boisea trivittata</i>	NL	iNaturalist
Green Stink Bug	<i>Chinavia hilaris</i>	NL	iNaturalist
Dogwood Spittlebug	<i>Clastoptera proteus</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Saddled Leafhopper	<i>Colladonus clitellarius</i>	NL	iNaturalist
Twice-stabbed Stink Bug	<i>Cosmopepla lintneriana</i>	NL	iNaturalist
Grape Phylloxera	<i>Daktulosphaira vitifoliae</i>	NL	iNaturalist
Widefooted Treehopper	<i>Enchenopa latipes</i>	NL	iNaturalist
Keeled Treehopper	<i>Entylia carinata</i>	NL	iNaturalist
Big-eyed Toad Bug	<i>Gelastocoris oculatus</i>	NL	iNaturalist
Red-banded Leafhopper	<i>Graphocephala coccinea</i>	NL	iNaturalist
Brown Marmorated Stink Bug	<i>Halyomorpha halys</i>	NL	iNaturalist
Coppery Leafhopper	<i>Jikradia olitoria</i>	NL	iNaturalist
Western Conifer Seed Bug	<i>Leptoglossus occidentalis</i>	NL	iNaturalist
Fringetree Lace Bug	<i>Leptoypha mutica</i>	NL	iNaturalist
American Giant Water Bug	<i>Lethocerus americanus</i>	NL	iNaturalist
Small Milkweed Bug	<i>Lygaeus kalmii</i>	NL	iNaturalist
Eastern Small Milkweed Bug	<i>Lygaeus kalmii angustomarginatus</i>	NL	iNaturalist
Sumac Gall Aphid	<i>Melaphis rhois</i>	NL	iNaturalist
	<i>Merocoris distinctus</i>	NL	iNaturalist
Citrus Flatid Planthopper	<i>Metcalfa pruinosa</i>	NL	iNaturalist
	<i>Mormidea lugens</i>	NL	iNaturalist
	<i>Nabis roseipennis</i>	NL	iNaturalist

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

Common Name	Scientific Name	Conservation Status	Source <sup>1</sup>
Northern Dog-day Cicada	<i>Neotibicen canicularis</i>	NL	iNaturalist
Say's Cicada	<i>Okanagana rimosa</i>	NL	iNaturalist
Large Milkweed Bug	<i>Oncopeltus fasciatus</i>	NL	iNaturalist
Meadow spittlebug	<i>Philaenus spumarius</i>	NL	iNaturalist
Four-lined Plant Bug	<i>Poecilocapsus lineatus</i>	NL	iNaturalist
	<i>Ranatra</i>	NL	iNaturalist
Masked Hunter	<i>Reduvius personatus</i>	NL	iNaturalist
Two-spotted Grass Bug	<i>Stenotus binotatus</i>	NL	iNaturalist
	<i>Stictocephala lutea</i>	NL	iNaturalist
Anchor Stink Bug	<i>Stiretrus anchorago</i>	NL	iNaturalist
Pale Green Assassin Bug	<i>Zelus luridus</i>	NL	iNaturalist

Sources: Ueda 2021; IUCN 2021; NYSDEC 2019, 2020a, 2020b, 2020c; USFWS 2020

Notes:

<sup>1</sup> Potential presence for mammals identified in *The Checklist of the Amphibians, Reptiles, Birds and Mammals of New York, Including Their Protective Status* (NYSDEC 2019) was determined through species range maps provided by IUCN.

Conservation Status Codes:

FT = Federally Threatened Species

NL = Not Listed

SE = NYS Endangered Species

SGCN = NYS Species of Greatest Conservation Need

SGCN-HP = NYS Species of Greatest Conservation Need – High Priority

SSC = NYS Species of Special Concern

ST = NYS Threatened Species