



## Memorandum

**To:** Brandon Smith and Lydia Lake (Borrego Solar Systems, Inc.)  
**From:** Environmental Design & Research, D.P.C. (EDR)  
**Date:** January 11, 2022  
**Reference:** Oneida Wind Project Listed Species Investigation  
**EDR Project No:** 21176

### Introduction

On behalf of Borrego Solar Systems, Inc. (the Client), Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) conducted a desktop review of publicly available data to provide information about the potential for state-listed threatened or endangered species to occur in the vicinity of the proposed Oneida Wind Project (the Project) located in the Town of Oneida, Madison County, New York (see Attachment 1, Figure 1).

On May 25, 2021, the Client received a letter in response to a request submitted to the New York Natural Heritage Program (NYNHP) indicating that there were no known records of state-listed threatened or endangered species in the vicinity of the Project. To investigate this issue further, EDR reviewed data from eBird, the New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper (ERM), the NYSDEC Environmental Assessment Form (EAF) Mapper, the New York State Breeding Bird Atlas, and the U.S. Fish and Wildlife Service (USFWS) online Information for Planning and Consultation (IPaC) system to determine if there were other records of state-listed threatened or endangered species occurring in the vicinity of the Project Site (see Attachment 1, Figure 2).

In addition, EDR conducted a reconnaissance-level site visit on November 18, 2021 to evaluate habitat conditions on the Project Site. This memorandum summarizes the publicly available databases considered by EDR and the findings of the desktop review. This memorandum also identifies the existing habitat conditions and features evaluated for listed species within the proposed Project Site during the reconnaissance-level site visit.

## Findings

### Avian Species

The eBird database, managed by the Cornell Laboratory of Ornithology, is an on-line database of bird observations collected by citizen scientists around the world and vetted by regional experts. Data are used to document bird distribution, abundance, habitat use, and trends within a simple, scientific framework to help inform bird research worldwide (eBird, 2021a). The nearest eBird hotspot, Mount Hope Park, is located approximately 2 miles northeast of the Project Site. Since 2016, a total of 74 bird species have been observed at this hotspot. Within the last five years, one state-listed threatened bird species (northern harrier [*Circus cyaneus*; also known as *Circus hudsonius*]) and one state-listed bird species of special concern (Cooper's hawk [*Accipiter cooperii*]) have been observed at this hotspot. EDR's habitat assessment for these species is provided below.

- The northern harrier is a slender-bodied hawk with long wings and a long tail. Key identifying characteristics include a facial ruff that gives the species an owl-like appearance, a white rump, and specialized foraging behavior (coursing and gliding low over fields and marshes). This species' diet consists of rodents and small birds. Northern harriers use a wide range of habitats including open grasslands, agricultural fields, prairies, shrubland, successional old fields, and both saltwater and freshwater marshes (Cornell Lab of Ornithology, 2021; NYNHP, 2021). Both wet and dry habitats are suitable where there is good ground cover. During the breeding season, nests are built of grasses and sticks on the ground in grassland or marshes within areas of tall, dense cover. In New York State, northern harriers are confirmed breeders in the western Great Lakes plains, open habitats of the Adirondacks, the western Finger Lakes, Long Island, and within the Hudson, St. Lawrence, and Lake Champlain valleys. Their winter range is similar, and use of specific areas for foraging and/or roosting typically depends on remnant vegetation height and density, prey abundance, and snow cover.
- The reconnaissance-level site visit indicated that there are some open field areas within the proposed Project Site that could potentially be suitable for use grassland bird species, including northern harriers. However, in general, these open areas are: (1) relatively small in size; surrounded by advancing successional shrubland and/or forestland; and (3) are broken up or partially isolated by wooded hedgerows/islands. Therefore, large expanses of open, contiguous grassland are not present within the Project Site, and suitability of on-site fields and shrubland for use by northern harriers may be relatively limited. Open areas within the Project Site are shown in Attachment 2. Beyond the Project Site boundaries, EDR

identified an open field area to the west/southwest that may be more suitable for use by northern harriers given its current successional condition and size (approximately 31 acres).

- The Cooper's hawk is a woodland raptor that uses deciduous, mixed, and coniferous woodlands for nesting and feeding, as well as urban and suburban areas (Cornell Lab of Ornithology, 2021). Forested habitat that could potentially support nesting and/or foraging Cooper's hawks was identified within and adjacent to the proposed Project Site (see Attachment 2, Photos 3 and 6).

The second-closest eBird hotspot is the Madison County Landfill, which is located approximately 4 miles west of the proposed Project Site. Since 2016, a total of 34 bird species have been observed at this hotspot. Within the last five years, one state-listed endangered bird species (peregrine falcon [*Falco peregrinus*]) and one state-listed threatened bird species (bald eagle [*Haliaeetus leucocephalus*]) have been observed. EDR's habitat assessment for these species is provided below.

- The peregrine falcon often nests on ledges or holes on the faces of rocky cliffs, and in more urban areas, on artificial structures such as bridges and tall buildings (NYNHP, 2021b). Wintering peregrine falcons frequently utilize buildings, towers, and steeples in urban areas, and open areas with plentiful prey in more natural settings (NYNHP, 2021b). Based on the results of EDR's site visit, suitable habitat for peregrine falcons (i.e., cliffs or tall structures) does not appear to be present on or adjacent to the proposed Project Site (see Attachment 2, Photos 1 and 9).
- In New York State, bald eagles usually winter and breed in undisturbed areas with large bodies of water that support high populations of fish and waterfowl, their primary food sources. Large, heavy nests are typically built in tall pine, spruce, fir, cottonwood, oak, poplar, or beech trees (NYNHP, 2021c). Although the proposed Project Site contains deciduous forests composed of oak and beech trees, these areas do not appear to provide suitable breeding or wintering habitat for bald eagles, as there are no nearby areas of open water that could provide their primary food sources.

The ERM is an interactive mapping application developed by the NYSDEC that can be used to identify some of New York State's natural resources and environmental features that are state or federally protected, or of conservation concern (NYSDEC, 2021a). Specifically, the maps display general areas where rare animals and rare plants have been documented by the NYNHP. The ERM desktop analysis did not indicate the known presence of any state-listed species in the vicinity of the Project Site. However, the ERM did identify an area approximately 2 miles south of the

proposed Project Site where unspecified animals listed as endangered or threatened had been identified.

The EAF Mapper is a tool developed by the NYSDEC that searches multiple Geographic Information System (GIS) data sets within a user-defined project area. Review of the EAF Mapper did not identify any state-listed species or endangered and threatened species habitat occurring in the vicinity of the proposed Project Site.

The New York State Breeding Bird Atlas (BBA) is a statewide inventory of all breeding birds (eBird, 2021b). The first atlas inventory was conducted from 1980 – 1985, the second from 2000 – 2005 (BBA II), and NYSDEC is currently working with agency and conservation partners to conduct the third atlas inventory from 2020 – 2024. Field work is conducted by dividing the state into blocks of approximately 9 square miles, within which volunteers record all the bird species observed during the breeding season and document evidence of breeding activity (NYSDEC, 2021b). The proposed Project is located in Block 4476A. The only data available for review on the NYSDEC website was from BBA II efforts (2000 – 2005). Most of the species recorded are common birds of the field and forest habitats present in the region, and no state-listed threatened or endangered species were identified.

### **Other Listed Species**

A shapefile of the Project Site was upload to the USFWS IPaC system on January 6, 2022. According to the IPaC system, no federally listed threatened or endangered species were identified as occurring within the boundaries of the Project Site.

### **Conclusions**

In summary, publicly available data sources were queried to identify threatened and endangered species that have the potential to be present within the Project Site. This review suggested that the proposed Project Site is likely to include a wildlife community dominated by relatively common species typically found in agricultural, scrub-shrub, and forested habitats. Based on state-listed species with documented occurrences in the vicinity of the proposed Project Site within the past five years, and a reconnaissance-level site visit conducted to evaluate habitat suitability, EDR determined that potential habitat may be present within and/or adjacent to the Project Site for two listed species: Cooper's hawk and northern harrier. Specifically, suitable habitat for Cooper's hawk appears to be present within forestland located on and adjacent to the Project Site. Potentially suitable habitat for northern harrier may be present within some on-site open areas, although an open field area located west/southwest of (and adjacent to) the Project Site

may be more suitable given its larger size and more open character. The suitability of on-site open areas appears to be limited by small open field patch size, relatively high woody vegetation cover (and advancing succession), and the presence of wooded hedgerows that may serve to isolate open fields. Suitable habitat for peregrine falcon and bald eagle is unlikely to be present within the Project Site given these species' more specialized habitat requirements and the lack of required features (e.g., tall structures or cliffs for nesting, open water areas for foraging).

**Attachments:** Attachment 1: Figures

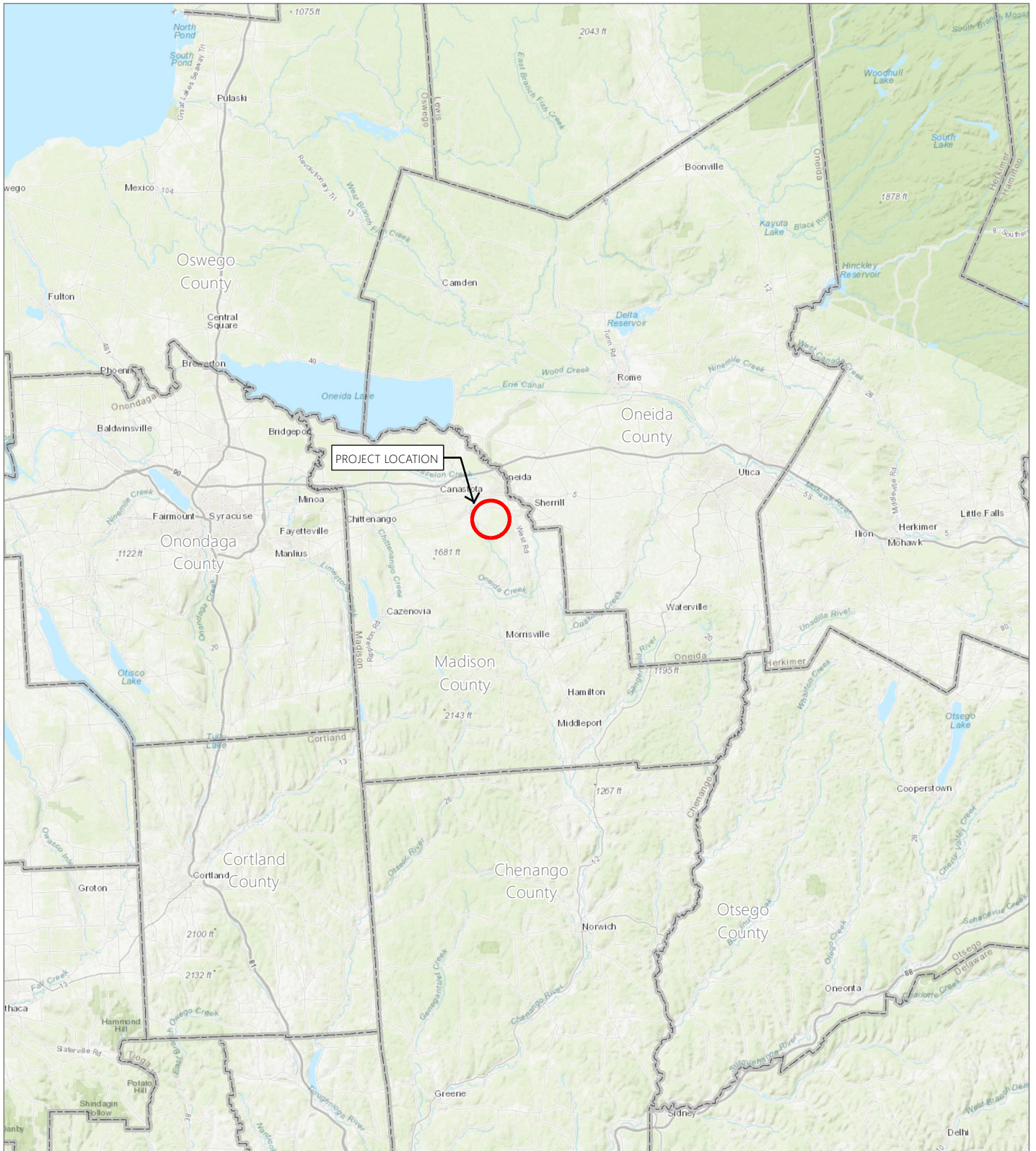
Attachment 2: Representative Photographs

## REFERENCES

- Cornell Lab of Ornithology. 2021. *All About Birds*. Ithaca, New York. Available at: <https://www.allaboutbirds.org/news/> (Accessed November 2021).
- eBird. 2021a. *Hotspots*. Cornell Lab of Ornithology, Ithaca, New York. Available at: <https://ebird.org/hotspots> (Accessed November 2021).
- eBird. 2021b. *New York State Breeding Bird Atlas III*. Cornell Lab of Ornithology, Ithaca, New York. Available at: <https://ebird.org/atlasny> (Accessed November 2021).
- NYNHP. 2021a. *Online Conservation Guide for Circus hudsonius*. Available at: <https://guides.nynhp.org/northern-harrier> (Accessed November 2021).
- NYNHP. 2021b. *Online Conservation Guide for Falco peregrinus*. Available at: <https://guides.nynhp.org/peregrine-falcon> (Accessed November 2021).
- NYNHP. 2021c. *Online Conservation Guide for Haliaeetus leucocephalus*. Available at: <https://guides.nynhp.org/bald-eagle> (Accessed November 2021).
- NYSDEC. 2021a. *Environmental Resource Mapper*. Division of Fish and Wildlife. Available at: <https://www.dec.ny.gov/animals/38801.html> (Accessed November 2021).
- NYSDEC. 2021b. *New York State Breeding Bird Atlas*. Bureau of Wildlife. Available at: <https://www.dec.ny.gov/animals/7312.html> (Accessed November 2021).

## **Attachment 1: Figures**

**Figure 1. Regional Project Location**



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**Figure 1. Study Area**



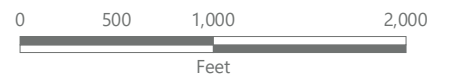
**Oneida Wind**

Town of Oneida, Madison County, New York



*Listed Species Investigation*

 Project Site



## **Attachment 2: Representative Photographs**

**Photo 1**

Representative photo of mowed trails found throughout the Southern portion of the proposed Project Site



**Photo 2**

Representative photo of successional old field/shrubland communities within the Northwest portion of the Project Site



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**Photo 3**

Representative photo of open pastureland within the Western portion of the proposed Project Site and adjacent white pine stand.



**Photo 4**

Representative photo of adjacent property pastureland West of Project Site.



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**Photo 5**

Representative photo of deciduous hardwood forest within the Northern portion of the Project Site



**Photo 6**

Mowed meadow with adjacent deciduous forest habitat in the Northern portion of Project Site

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**Photo 7**

Representative photo of a mowed area within the Northwestern portion of the Project Site



**Photo 8**

Representative photo of successional old field/shrubland communities within the Northeastern portion of the Project Site

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