



# Wetland Delineation Report

## **McHenry Solar Farm**

Nunda Township, McHenry County, Illinois

November 12, 2025

Project Number: 20251635

# McHenry Solar Farm

Nunda Township, McHenry County, Illinois

November 12, 2025

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Eric C. Parker, SPWS Principal Scientist

# Table of Contents

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1.0	Introduction .....	4
2.0	Methods .....	5
2.1	Wetlands .....	5
3.0	Results and Discussion .....	5
3.1	Desktop Review .....	8
	Table 1. Summary of NRCS Mapped Soils within the Study Area .....	8
3.2	Field Review .....	10
	Table 2. Summary of Wetlands Identified within the Study Area .....	11
3.3	Other Considerations .....	13
4.0	Conclusion .....	14
5.0	References .....	15

Appendix A | Figures

Appendix B | APT Analysis

Appendix C | Wetland Determination Data Sheets

Appendix D | Site Photographs

Appendix E | Floristic Quality Assessment

Appendix F | Delineator Qualifications

Appendix G | Off-Site Analysis



## 1.0 Introduction

Heartland Ecological Group, Inc. (“Heartland”) completed a wetland determination and delineation on the McHenry Solar Farm site on October 7, 2025 at the request of Surya Powered, LLC. Fieldwork was completed by Eric C. Parker, SPWS (Appendix F, Qualifications). The 75.92-acre site (the “Study Area”) is northwest of the intersection of Crystal Lake Road South and Mason Hill Road, in the northeast ¼ of Section 9 and northwest ¼ of Section 9, T44N, R8E, Township of Nunda, McHenry County, IL (Figure 1, Appendix A). The purpose of the wetland delineation was to determine the location and extent of wetlands within the Study Area and identify and approximately map observed watercourses and waterbodies.

Four (4) wetland areas totaling approximately 1.26 acres were delineated and mapped within the Study Area (Figure 6, Appendix A). No watercourses/waterways or waterbodies were observed within the Study Area. Boone Creek is near the northwest corner of the Study Area.

Wetlands, waterways, and waterbodies discussed in this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers (USACE), state regulation under the jurisdiction of the Illinois Environmental Protection Agency (IEPA), and local or county zoning authorities. Heartland recommends this report be submitted to local authorities, the IEPA, and USACE for final jurisdictional review and concurrence.



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## 2.0 Methods

### 2.1 Wetlands

Wetlands were determined and delineated using the criteria and methods described in the USACE Wetlands Delineation Manual, T.R. Y-87-1 (“1987 Corps Manual”) and the applicable *Regional Supplement to the Corps of Engineers Wetland Delineation Manual*.

Determinations and delineations utilized available resources including the U.S. Geological Survey’s (USGS) *IL 7.5 Minute Series (Topographic) Map* (Figure 2, Appendix A), the Natural Resource Conservation Service’s (NRCS) Soil Survey Geographic Database (SSURGO), U.S. Department of Agriculture’s (USDA) *Web Soil Survey* (Figure 3, Appendix A), the U.S. Fish and Wildlife Service’s (USFWS) *National Wetland Inventory (NWI)* data layer (Figure 4, Appendix A), and the Illinois State Geological Survey’s (ISGS) *Illinois Height Modernization (ILHMP) LiDAR Data* (Figure 5, Appendix A). The USGS *National Hydrography Dataset* is included in Figures 2 and 4, Appendix A.

Wetland determinations were completed on-site at sample points, often along transects, using the three (3) criteria (vegetation, soil, and hydrology) approach per the 1987 Corps Manual and the Regional Supplement. Procedures in these sources were followed to demonstrate that, under normal circumstances, wetlands were present or not present based on a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology.

In actively farmed areas within the Study Area where hydric soils may be present, methods described in Chapter 5 (Difficult Wetland Situations) of the Regional Supplement were followed. Available aerial imagery was analyzed using procedures described in the *Guidance for Offsite Hydrology/Wetland Determinations* (USACE and Minnesota Board of Water and Soil Resources, July 2016 – “July 2016 Guidance”) and the ECS-Wetland Mapping Conventions per Illinois Bulletin No. IL 190-8-4, December 1997 (1997 Illinois Guidance). However, FSA slides were not utilized. An off-site aerial imagery analysis (Off-Site Analysis) was completed to document the presence or absence of wetland signatures and assist in the wetland determination. A wetland signature is evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration to meet wetland hydrology and possibly wetland vegetation criteria. Wetland signatures often vary based on the type and seasonal date of the aerial imagery. For example, there are seven (7) standardized signature types in actively farmed settings described in the July 2016 Guidance and in the



Illinois Guidance. To assist in interpretations of wetland signatures, a WETS analysis was used to compare antecedent precipitation in the three (3) months leading up to each aerial image to the long-term (30-year) precipitation averages and standard deviation to determine if antecedent precipitation conditions for each image was normal, wet, or dry. Areas within agricultural fields are typically determined to be wetland if hydric soils and wetland hydrology indicators are present and aerial images taken in the five (5) (or more) most recent normal antecedent precipitation images show at least one (1) of the wetland signatures per the July 2016 Guidance and Illinois Guidance. Although the Off-Site Analysis concentrates on imagery taken under normal antecedent precipitation conditions, the images determined to be taken under wet and dry antecedent precipitation conditions were also analyzed and considered. Determinations and delineation of wetlands in agricultural areas are typically based on an outline of the largest wetland signature on an image taken under “normal” antecedent conditions and based on the consistency of the signatures (1997 Illinois Guidance).

In non-farmed wetlands a Floristic Quality Assessment (FQA) was completed by listing species identified and applying the assessment technique developed by Swink and Wilhelm (1994) for a fast evaluation of plant communities. This method calculates a mean Coefficient of Conservatism value (C) and a Floristic Quality Index value (FQI) for each wetland area. A state or region assigns each native species a C value ranging between 0 to 10 that represents an estimated probability that a plant species is likely to occur in a landscape relatively unaltered from what is thought to be a pre-settlement condition. A C-value of 0 is applied to a species that demonstrates no fidelity to any remnant natural community, whereas a C-value of 10 is applied to plants that are nearly always restricted to pre-settlement remnant communities. Values lower than 4 generally represent weedy species and values closer to 10 represent more “conservative”, rare, or disturbance intolerant species (Swink and Wilhelm, 1994). FQI values were calculated using the following formula:

$$FQI = \text{Mean } C (\sqrt{N})$$

*C* = Coefficient of Conservatism

*N* = species richness (Identifiable Native and Non-native)



The FQI has traditionally been calculated using C values and species richness of only native species. However, more recently, scientists have been including the non-native species in the calculations, giving all non-native species a C value of “0”. This methodology better reflects the actual integrity of a site, particularly in highly disturbed conditions dominated by non-native taxa. Disregarding the non-native species can often give sites falsely elevated mean C and FQI values that do not reflect the presence or abundance of these less-desirable species, which can influence the overall floristic quality of an area.

Recent weather conditions influence the visibility or presence of certain wetland hydrology indicators. An assessment of recent precipitation patterns helps to determine if climatic/hydrologic conditions were typical when the field investigation was completed. Therefore, a review of antecedent precipitation in the 90 days leading up to the field investigation was completed. Using an Antecedent Precipitation Tool (APT) analysis developed by the USACE (Deters & Gutenson 2021), the amount of precipitation over these 90 days was compared to averages and standard deviation thresholds observed over the past 30 years to generally represent if conditions encountered during the investigation were normal, wet, or dry. Recent precipitation events in the weeks prior to the investigation were also considered while interpreting wetland hydrology indicators. Finally, the Palmer Drought Severity Index was checked for long-term drought or moist conditions (NOAA, 2018).

The uppermost wetland boundary and sample points were identified and marked with wetland flagging and located with a Global Navigation Satellite System (GNSS) receiver capable of sub-meter accuracy. In some cases, wetland flagging was not utilized to mark the boundary, and the location was only recorded with a GNSS receiver, particularly in active agricultural areas. The GNSS data was then used to map the wetlands using ESRI ArcGIS Pro™ software.

Field-observed waterways and waterbodies within the Study Area were identified and mapped in this investigation if they may be under federal, state, or local zoning authority or were previously identified in Figures 2 and 4. Culverts associated with ditches and waterways were also identified and located with GPS if they were adjacent to wetland boundaries.



## 3.0 Results and Discussion

### 3.1 Desktop Review

#### Climatic Conditions

According to the APT analysis using the previous 90 days of precipitation data, conditions encountered at the time of the fieldwork were expected to be normal for the time of year (Appendix B). The Palmer Drought Severity Index was checked as part of the APT analysis, and the long-term conditions at the time of the fieldwork were not available. Fieldwork was completed outside the dry season based on long-term regional hydrology data utilized in the WebWIMP Climatic Water Balance and computed as part of the APT analysis.

#### General Topography and Land Use

The topography within the Study Area was rolling, with various hills and slopes and a topographic high of approximately 826 feet above mean sea level (msl) on the south side, with a topographic low of approximately 781 feet above msl near the northwest corner (Figures 2, 5, and 6, Appendix A). Land uses within the Study Area and surrounding areas are primarily agricultural row cropping with residential and wooded areas also present.

#### Soil Mapping

Soils mapped by the NRCS Soil Survey within the Study Area and their hydric status are summarized in Table 1. Wetlands identified during the field investigation are located primarily within areas mapped as hydric or partially hydric soils including wetland indicator soils (Figures 3 and 4, Appendix A).

**Table 1. Summary of NRCS Mapped Soils within the Study Area**

<b>Soil symbol: Soil Unit Name</b>	<b>Soil Unit Component</b>	<b>Soil Unit Component Percentage</b>	<b>Landform</b>	<b>Hydric status</b>
148A: Proctor silt loam, 0-2% slopes	Proctor	91-100	Outwash plains, stream terraces	No
	Brenton	0-9	Outwash plains, stream terraces	No
148B: Proctor silt loam, 2-5% slopes	Proctor	91-100	Stream terraces, outwash plains	No
	Brenton	0-9	Stream terraces, outwash plains	No



Soil symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
149A: Brenton silt loam, 0-2% slopes	Brenton	91-100	Stream terraces, outwash plains	No
	Drummer-Drained	0-9	Swales on outwash plains and till plains	Yes
153A: Pella silty clay loam, cool, 0-2% slopes	Pella-Cool	80-91	Interdrumlins	Yes
	Virgil	5-9	Drumlins	No
	Elburn	4-8	Drumlins	No
	Houghton	1-3	Depressions	Yes
290C2: Warsaw loam, 4-6% slopes, eroded	Warsaw-Eroded	90-100	Stream terraces, kames	No
	Rodman-Eroded	0-10	Outwash plains	No
297B: Ringwood silt loam, 2-4% slopes	Ringwood	85-95	Moraines	No
	Elburn-Cool	3-8	Moraines	No
	Pella-Cool	2-7	Drainageways	Yes
363C2: Griswold loam, 4-6% slopes, eroded	Griswold-Eroded	80-95	Till plains	No
	Warsaw	5-20	Kames, till plains	No
802B: Orthents, loamy, undulating	Orthents-Loamy	100	Outwash plains, ground moraines	No

### **Wetland Mapping**

The NWI mapping (Figure 4, Appendix A) identifies no (0) wetland areas within the Study Area. Riverine (R5UBH) wetlands are depicted just outside the Study Area to the northwest.

### **Waterway and Waterbody Mapping**

The NHD data included in Figures 2 and 4 (Appendix A) identifies no (0) waterways and no (0) waterbodies within the Study Area. Boone Creek is depicted nearby to the northwest.

### **Aerial Photography**

Available NAIP imagery of the Study Area from the period of 2004-2023 (Appendix G) was reviewed for evidence of wetland signatures and to gain insight into the site's recent history. The majority of the Study Area was row cropped in each year analyzed and a wetland signature was present in at least one (1) area in every year. Two (2) small



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structures on the east edge of the Study Area were removed between June 2014 and September 2015. No other major changes to the Study Area were observed.

### **Off-Site Analysis**

Agricultural fields within the Study Area have mapped hydric or potentially hydric soils and were the focus of the Off-Site Analysis (OSA - Appendix G). From the aerial imagery, in farmed depressional and swale areas, the secondary wetland hydrology indicators of “Saturation Visible on Aerial Imagery” (C9) and “Stunted or Stressed Plants” (D1) were noted.

A total of 18 aerial images were selected and reviewed based on availability and quality of the imagery. Of these images, ten (10) were taken under normal antecedent precipitation conditions. Signatures were noted in six (6) areas within the Study Area in landscape positions described by the NRCS to support hydric soil components and were the focus of the OSA. At least one (1) of the seven (7) described wetland signatures per the July 2016 Guidance were consistently or somewhat consistently noted in five (5) of these areas on imagery taken under normal antecedent precipitation conditions. In imagery taken under wet antecedent precipitation conditions, such wetland signatures were noted in five (5) of the five (5) images. In imagery taken under dry antecedent precipitation conditions, there were wetland signatures noted in three (3) of the seven (3) images.

Based on the OSA, five (5) areas were thought to be potentially wetland prior to the fieldwork. Two (2) of these five (5) areas appeared to be located along drainageways, while the others were situated either on a slope or in a depression. Drain tile signatures were not visible in the images included in the OSA.

## **3.2 Field Review**

Four (4) wetlands were identified and delineated within the Study Area. Wetland determination data sheets (Appendix C) were completed at twelve (12) sample points that were representative of the wetland and upland conditions near the boundary and where potential wetlands may be present based on the desktop review and field reconnaissance. Appendix D provides photographs, typically at the sample point locations of the wetlands and adjacent uplands. The wetland boundary and sample point locations are shown on Figure 6 (Appendix A), and the wetlands are summarized in Table 2 and detailed in the following sections.



**Table 2. Summary of Wetlands Identified within the Study Area**

<b>Wetland ID</b>	<b>Wetland Description</b>	<b>*Surface Water Connections</b>	<b>Acreage (on-site)</b>
W-1	Wet Meadow/ Shallow Marsh	Appearing as isolated	0.16
W-2	Farmed Wet Meadow	Appearing as isolated	0.58
W-3	Farmed Wet Meadow	Appearing as isolated	0.24
W-4	Farmed Wet Meadow	Appearing as isolated	0.29
<i>*Classification based on Heartland’s professional opinion. Local zoning authorities may have additional restrictions. USACE has authority for determining federal jurisdiction of wetlands and waterways.</i>			<b>0.96</b>

**Wetland 1 (W-1)**

Wetland 1 (W-1) is a 0.16-acre wet meadow and shallow marsh located in a depression that appears to have been historically excavated and is being farmed around. W-1 appears isolated within the landscape. The boundary of W-1 generally coincided with a well-defined topographic break. W-1 is a ruderal community with a native Mean C of 2.4 and a native FQI of 6.8 (Appendix E).

Dominant vegetation observed in W-1 included reed canary grass (*Phalaris arundinacea*, FACW). The wetland vegetation parameter was met via the Rapid Test for Hydrophytic Vegetation, the Dominance Test, and a Prevalence Index of 1.82.

The Hydrogen Sulfide (A4), Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6) hydric soil indicators were noted in W-1; thus, the hydric soil parameter was met.

The primary wetland hydrology indicators of Surface Water (A1), High Water Table (A2), Saturation (A3), and Hydrogen Sulfide Odor (C1) were noted within W-1. Furthermore, the secondary indicators included Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), and a positive FAC-Neutral Test (D5). Therefore, the wetland hydrology parameter was met.



### **Wetland 2 (W-2)**

Wetland 2 (W-2) is a 0.58-acre farmed wet meadow located on a side slope in the central portion of the Study Area and appears isolated. W-2 was identified during the OSA, was verified and delineated in the field, and did not coincide with a topographic break.

Dominant vegetation observed in W-2 included fall panic grass (*Panicum dichotomiflorum*, FACW) and three-seeded-mercury (*Acalypha rhomboidea*, FACU). The wetland vegetation parameter was met via the Prevalence Index of 2.85. Vegetation was disturbed due to agricultural row cropping, and the 2025 corn crop appeared healthy at the location of the sample point.

The Depleted Below Dark Surface (A11) and Depleted Matrix (F3) hydric soil indicators were noted in W-2; thus, the hydric soil parameter was met.

No primary wetland hydrology indicators were observed within W-2. However, the secondary indicators included Saturation Visible on Aerial Imagery (C9) and Stunted or Stressed Plants (D1) per the OSA. Therefore, the wetland hydrology parameter was met.

### **Wetland 3 (W-3)**

Wetland 3 (W-3) is a 0.24-acre farmed wet meadow located in a slight swale/depression in the central/east portion of the Study Area and appears isolated. Wetland W-3 was identified in the OSA, verified in the field, and the boundary generally coincided with a poorly defined topographic break.

Dominant vegetation observed in W-3 included fall panic grass (FACW), barnyard grass (*Echinochloa crus-galli*, FAC), and three-seeded-mercury (FACU). The wetland vegetation parameter was met via the Dominance Test and a Prevalence Index of 3.0. Vegetation was disturbed due to agricultural row cropping, and the 2025 corn crop appeared healthy at the location of the sample point.

The Depleted Below Dark Surface (A11) and Depleted Matrix (F3) hydric soil indicators were noted in W-3; thus, the hydric soil parameter was met.

No primary wetland hydrology indicators were observed within W-3. However, the secondary indicators included Saturation Visible on Aerial Imagery (C9) and Stunted or Stressed Plants (D1) per the OSA. Therefore, the wetland hydrology parameter was met.



### **Wetland 4 (W-4)**

Wetland 4 (W-4) is a 0.29-acre farmed wet meadow located in a slight swale/depression in the southeast portion of the Study Area and appears isolated. The boundary of W-4 was identified during the OSA and preliminary delineation, and verified in the field, and generally coincided with a poorly defined topographic break.

Dominant vegetation observed in W-4 included fall panic grass (FACW), barnyard grass (FAC), and three-seeded-mercury (FACU). The wetland vegetation parameter was met via the Dominance Test and a Prevalence Index of 2.73. Vegetation was disturbed due to agricultural row cropping, and the 2025 corn crop appeared healthy at the location of the sample point.

The Depleted Matrix (F3) hydric soil indicator was noted in W-4; thus, the hydric soil parameter was met.

No primary wetland hydrology indicators were observed within W-3. However, the secondary indicators included Saturation Visible on Aerial Imagery (C9), Stunted or Stressed Plants (D1) per the OSA, and a positive FAC-Neutral Test (D5). Therefore, the wetland hydrology parameter was met.

### **Waterways/Watercourses and Waterbodies**

No watercourses/waterways or waterbodies were observed within the Study Area. However, Boone Creek is approximately 100 feet northwest of the Study Area.

### **3.3 Other Considerations**

This report is limited to the identification and delineation of wetlands within the Study Area. Other regulated environmental resources that could result in land use restrictions may be present within the Study Area that were not evaluated by Heartland (e.g., floodplains, cultural resources, and threatened or endangered species).



## 4.0 Conclusion

Heartland completed a wetland determination and delineation within the McHenry Solar Farm site on October 7, 2025 at the request of Surya Power, LLC. Fieldwork was completed by Eric C. Parker, SPWS, (Appendix F). The Study Area lies in Section 8 and Section 9, T44N, R8E, Township of Nunda, McHenry County, IL (Figure 1, Appendix A).

Four (4) wetland areas were delineated and mapped within the 75.92-acre Study Area (Figure 7, Appendix A). The wetlands, which may be classified as wet meadow / shallow marsh and farmed wet meadow, total approximately 1.26 acres within the Study Area. No watercourses/waterways or waterbodies were observed within the Study Area; however, Boone Creek is near the Study Area's northwest corner.

Wetlands, waterways, and waterbodies discussed in this report may be subject to federal regulation under the jurisdiction of the USACE, state regulation, and the local zoning authority. Heartland recommends this report be submitted to the USACE for final jurisdictional review and concurrence. Review by local or state authorities may be necessary for determination of any applicable zoning and setback restrictions.

Heartland recommends that all applicable regulatory agency reviews and permits are obtained prior to beginning work within the Study Area or within or adjacent to wetlands or waterways. Heartland can assist with evaluating the need for additional environmental reviews, surveys, or regulatory agency coordination in consideration of the proposed activity and land use as requested but is outside of the scope of the wetland delineation.

Experienced and qualified professionals completed the wetland determination and delineation using standard practices and professional judgment. Wetland boundaries may be affected by conditions present within the Study Area at the time of the fieldwork. All final decisions on wetlands and their boundaries are made by the USACE and/or sometimes a local unit of government. Wetland determination and boundary reviews by regulatory agencies may result in modifications to the findings presented to the Client. These modifications may result from varying conditions between the time the wetland delineation was completed and the time of the review. Factors that may influence the findings may include but are not limited to precipitation patterns, drainage modifications, changes or modification to vegetation, and the time of year.



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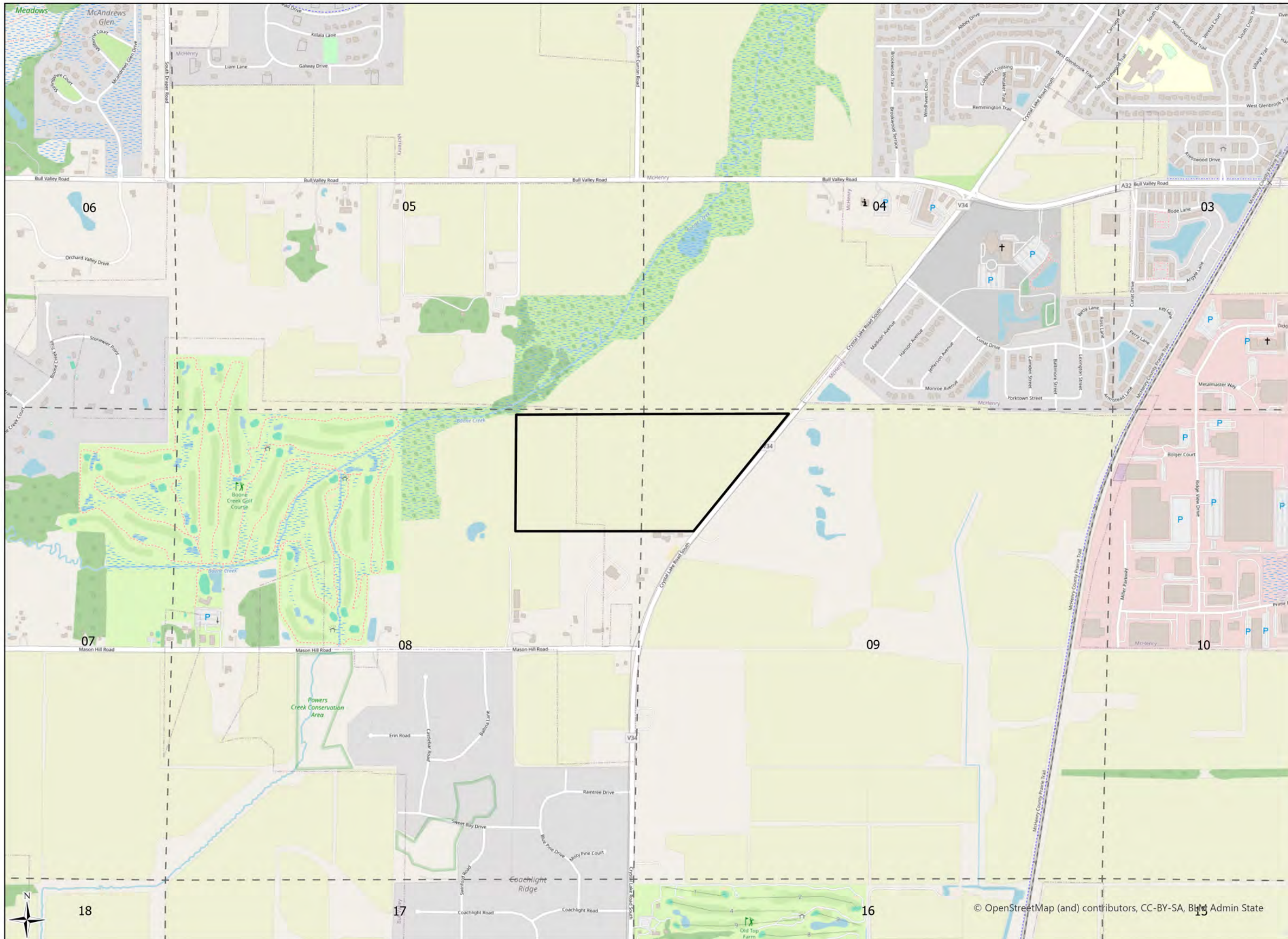
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Surya Powered LLC  
McHenry Solar Farm – McHenry Co.  
Project #: 20251635  
November 12, 2025

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## Appendix A | Figures



Study Area (75.92 ac)  
 PLSS Section



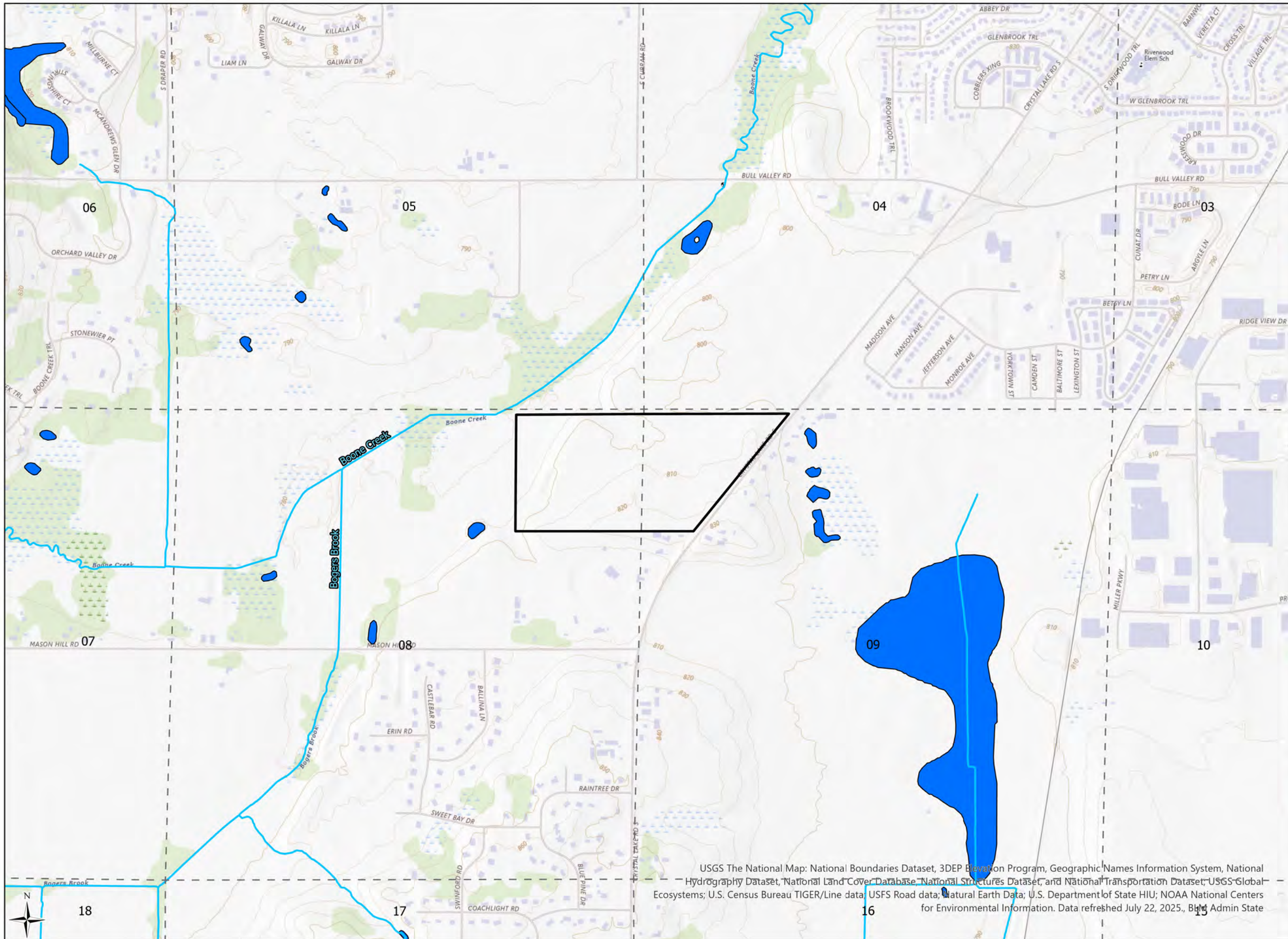
**Heartland**  
 ECOLOGICAL GROUP INC

Figure 1. Project Location  
 McHenry Solar Farm  
 Project #20251635  
 T44N, R8E, S08 & S09  
 T Nunda, McHenry Co, IL

OpenStreetMap  
 ESRI LRR: NCNE

Figure Created: 9/16/2025

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- Study Area (75.92 ac)
- PLSS Section
- ~ NHD Waterway
- NHD Waterbody



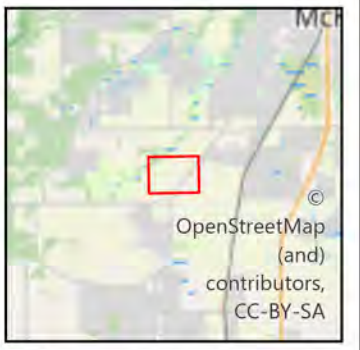
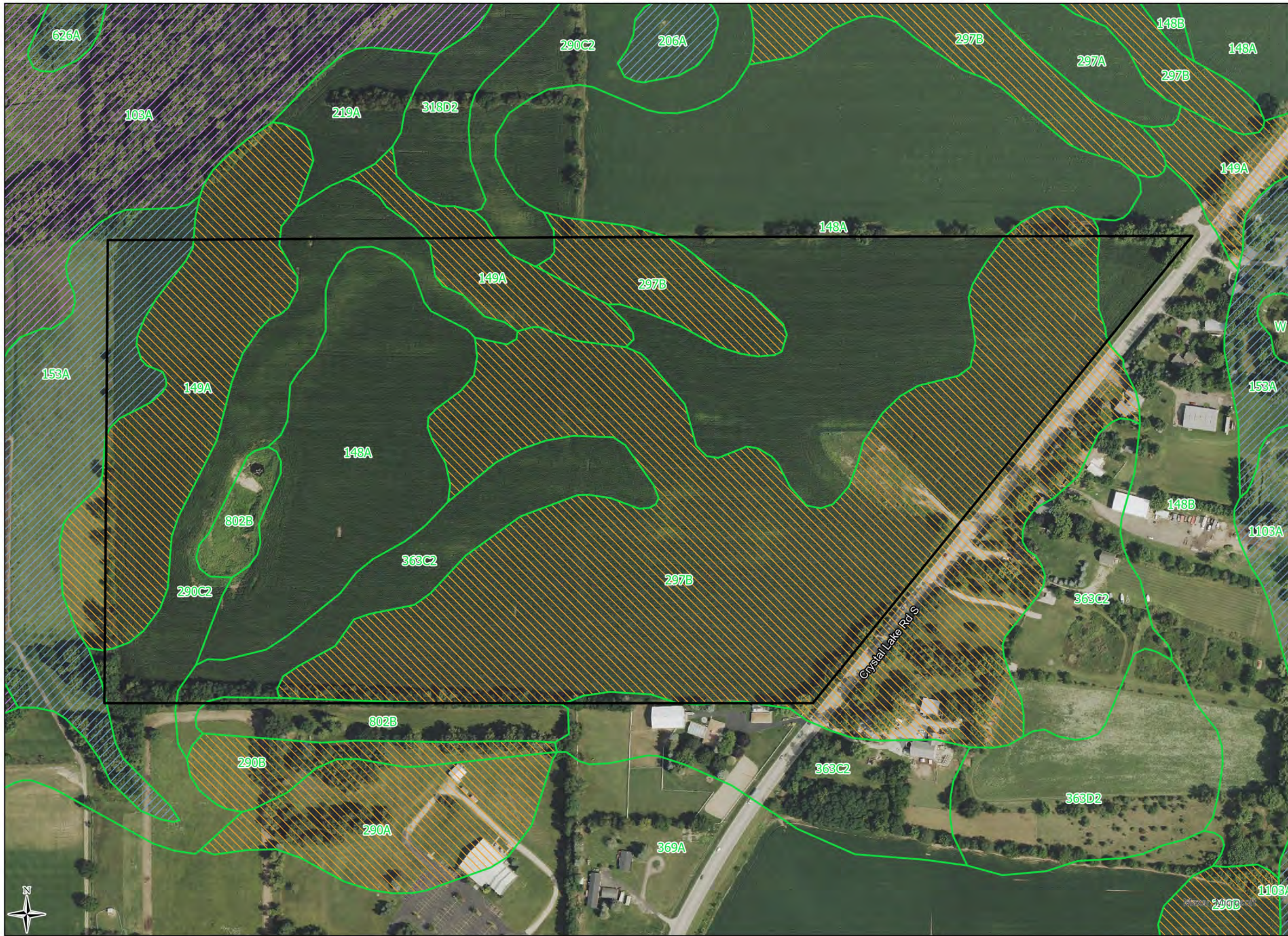
**Heartland**  
ECOLOGICAL GROUP INC

Figure 2. USGS  
Topography  
McHenry Solar Farm  
Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL

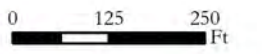
USGSTopo  
USGS LRR: NCNE

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information. Data refreshed July 22, 2025., Blaine Admin State





- Study Area (75.92 ac)
- Hydric (100%)
- Predominantly Hydric (85-99%)
- Partially Hydric (16-84%)
- Predominantly Non-Hydric 1-15%
- Non-Hydric (0%)

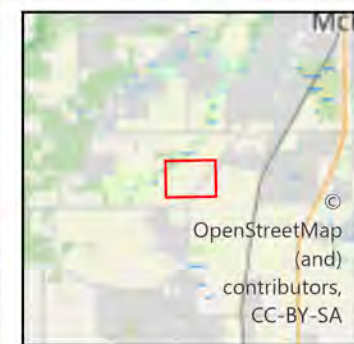


**Heartland**  
 ECOLOGICAL GROUP INC

Figure 3. NRCS Hydric Soils  
 McHenry Solar Farm  
 Project #20251635  
 T44N, R8E, S08 & S09  
 T Nunda, McHenry Co, IL

2023 NAIP NRCS LRR: NCNE

Figure Created: 9/16/2025



-  Study Area (75.92 ac)
-  NWI Wetlands
-  NHD Waterway
-  NHD Waterbody



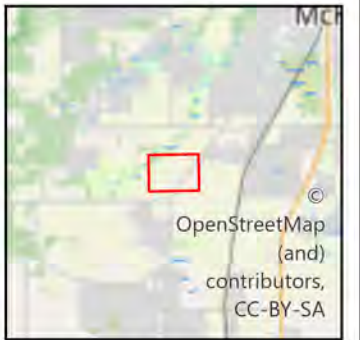
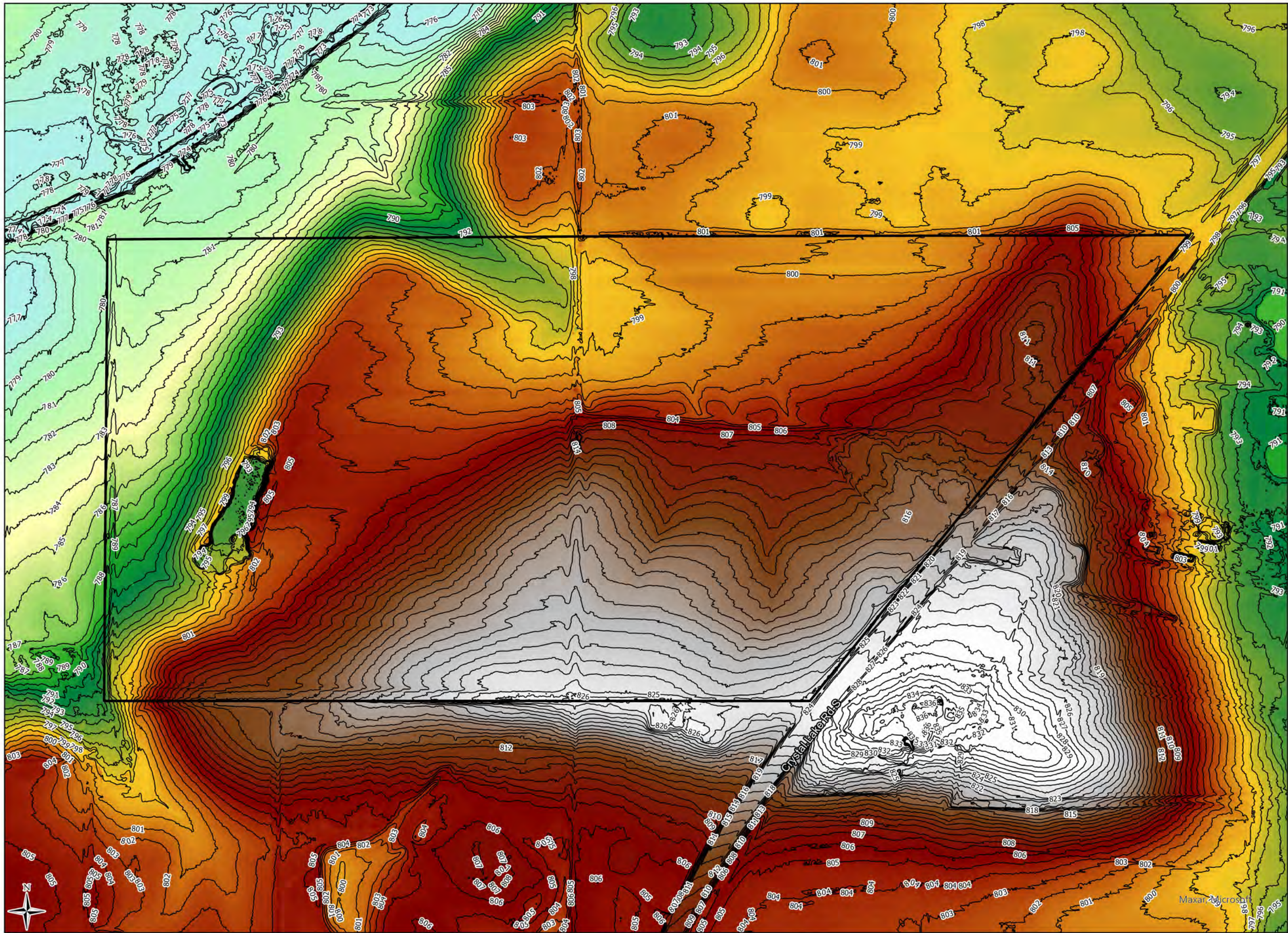
**Heartland**  
 ECOLOGICAL GROUP INC

Figure 4. National Wetland Inventory  
 McHenry Solar Farm  
 Project #20251635  
 T44N, R8E, S08 & S09  
 T Nunda, McHenry Co, IL

2023 NAIP  
 USFWS, USGS

LRR: NCNE

Figure Created: 9/16/2025



Study Area (75.92 ac)  
~ McHenry Co 1' Contours

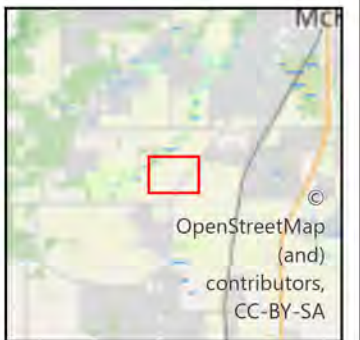
0 125 250 Ft

**Heartland**  
ECOLOGICAL GROUP INC

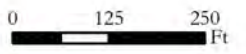
Figure 5. Color-Stretch  
 Digital Elevation Model  
 McHenry Solar Farm  
 Project #20251635  
 T44N, R8E, S08 & S09  
 T Nunda, McHenry Co, IL

ILHMP ISGS LRR: NCNE

Figure Created: 9/22/2025



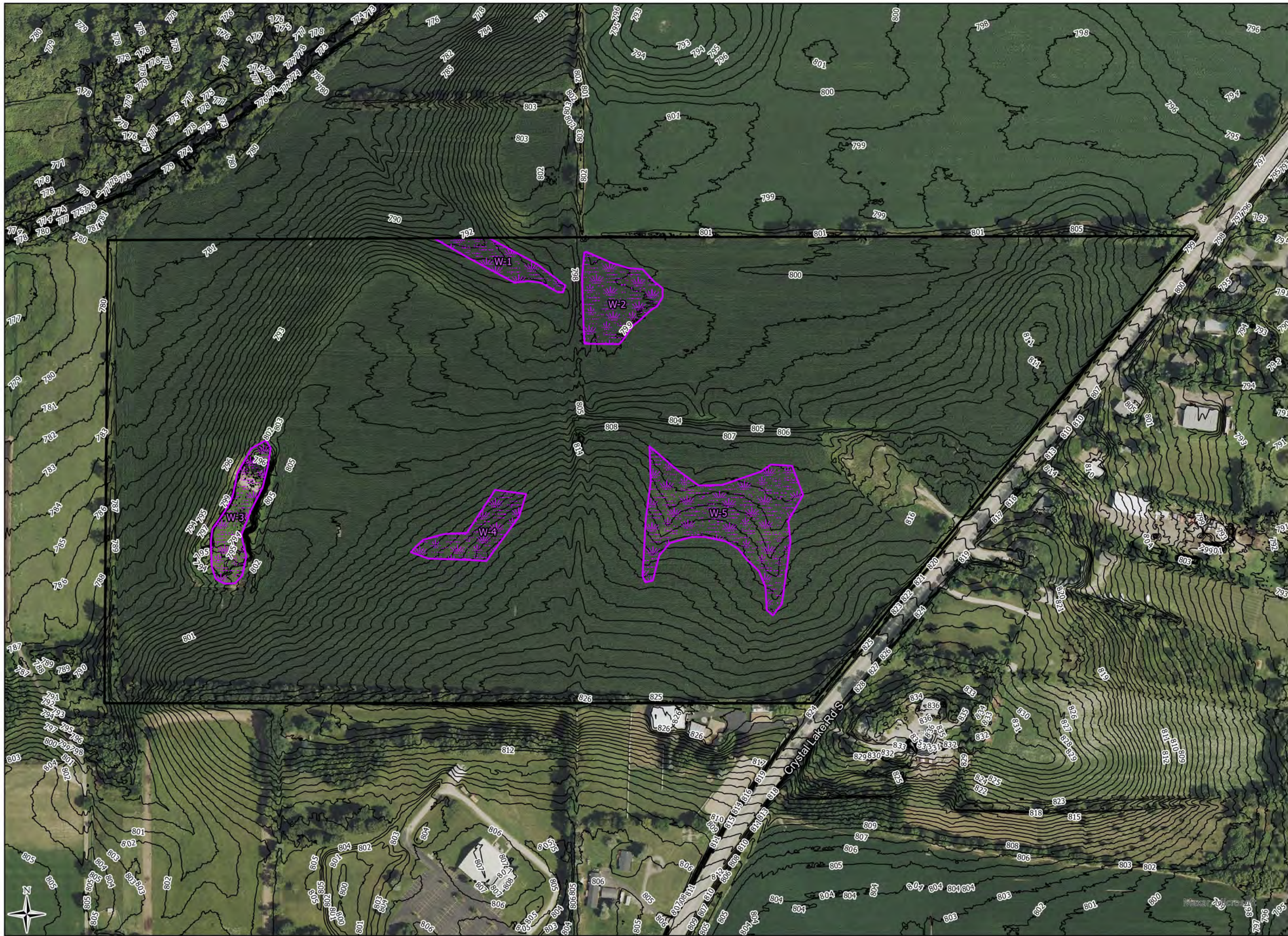
- Study Area (75.92 ac)
  - Field Delineated Wetlands (1.26 ac)
  - McHenry Co 1' Contours
- Sample Points**
- Upland
  - Wetland



**Heartland**  
ECOLOGICAL GROUP INC

Figure 6. Field Delineated Wetlands  
McHenry Solar Farm  
Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL

2023 NAIP  
McHenry Co, HEG  
LRR: NCNE  
Figure Created: 11/11/2025



- Study Area (75.92 ac)
- Preliminary Wetlands (5.06 ac)
- McHenry Co 1' Contours

0 125 250  
Ft

**Heartland**  
ECOLOGICAL GROUP INC

Figure 6. Preliminary Wetlands  
McHenry Solar Farm  
Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL

2023 NAIP  
McHenry Co, HEG LRR: NCNE

Figure Created: 9/22/2025



- Study Area (75.92 ac)
  - Field Delineated Wetlands (1.26 ac)
  - McHenry Co 1' Contours
- Sample Points**
- Upland
  - Wetland



**Heartland**  
ECOLOGICAL GROUP INC

Figure 7. Field Delineated Wetlands  
 McHenry Solar Farm  
 Project #20251635  
 T44N, R8E, S08 & S09  
 T Nunda, McHenry Co, IL  
 2023 NAIP  
 McHenry Co, HEG  
 LRR: NCNE  
 Figure Created: 10/17/2025

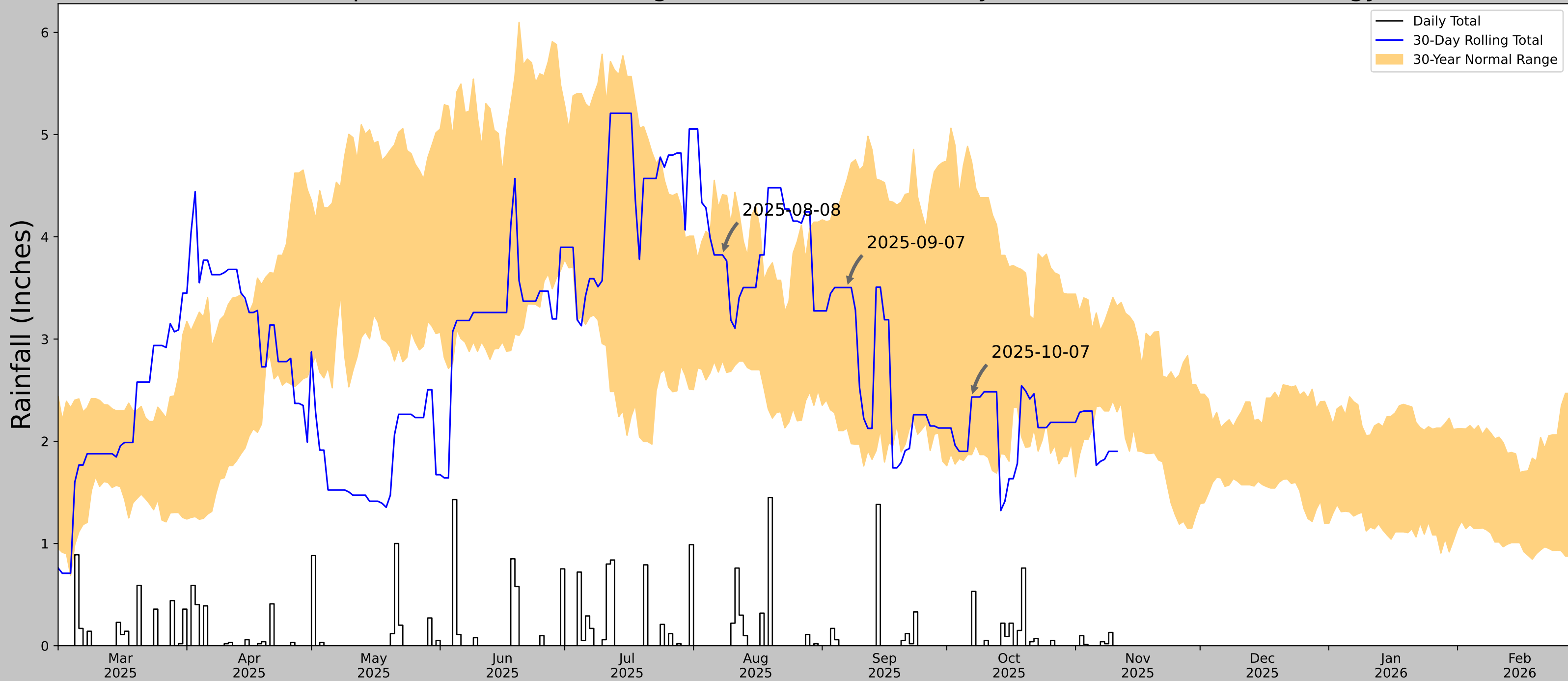


Surya Powered LLC  
McHenry Solar Farm – McHenry Co.  
Project #: 20251635  
November 12, 2025

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## Appendix B | APT Analysis

# Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	42.54041, -88.29059
Observation Date	2025-10-07
Elevation (ft)	857.469
Drought Index (PDSI)	Not available (2025-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-10-07	1.869685	4.733071	2.433071	Normal	2	3	6
2025-09-07	2.12874	4.561417	3.503937	Normal	2	2	4
2025-08-08	2.788976	4.412205	3.822835	Normal	2	1	2
Result							Normal Conditions - 12

Figures and tables made by the  
Antecedent Precipitation Tool  
Version 3.0



US Army Corps of Engineers



ERDC

Developed by:  
U.S. Army Corps of Engineers and  
U.S. Army Engineer Research and  
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
PELL LAKE WWTP	42.5322, -88.3328	848.097	2.223	9.372	1.021	6771	87
GENOA CITY 2.7 NW	42.5324, -88.3562	863.845	1.191	15.748	0.555	1	1
GENOA CITY	42.5, -88.3786	850.066	3.223	1.969	1.457	2567	0
BURLINGTON 6.2 SSW	42.5902, -88.3024	883.858	4.296	35.761	2.087	2	2
TWIN LAKES 1.5 NE	42.5354, -88.2386	791.011	4.801	57.086	2.435	5	0
LAKE GENEVA 0.6 ENE	42.5917, -88.4177	873.032	5.964	24.935	2.833	10	0
LAKE GENEVA WWTP	42.6006, -88.4253	846.129	6.67	1.968	3.015	1997	0



Surya Powered LLC  
McHenry Solar Farm – McHenry Co.  
Project #: 20251635  
November 12, 2025

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## Appendix C | Wetland Determination Data Sheets

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P1  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 0-2  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.311325 Long: -88.319896 Datum: WGS84  
 Soil Map Unit Name: Orthents, loamy, undulating NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>W-1</u>
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Surface Water (A1)</li> <li><input checked="" type="checkbox"/> High Water Table (A2)</li> <li><input checked="" type="checkbox"/> Saturation (A3)</li> <li><input type="checkbox"/> Water Marks (B1)</li> <li><input type="checkbox"/> Sediment Deposits (B2)</li> <li><input type="checkbox"/> Drift Deposits (B3)</li> <li><input type="checkbox"/> Algal Mat or Crust (B4)</li> <li><input type="checkbox"/> Iron Deposits (B5)</li> <li><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</li> <li><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</li> <li><input type="checkbox"/> Water-Stained Leaves (B9)</li> <li><input type="checkbox"/> Aquatic Fauna (B13)</li> <li><input type="checkbox"/> Marl Deposits (B15)</li> <li><input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)</li> <li><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</li> <li><input type="checkbox"/> Presence of Reduced Iron (C4)</li> <li><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</li> <li><input type="checkbox"/> Thin Muck Surface (C7)</li> <li><input type="checkbox"/> Other (Explain in Remarks)</li> </ul>	<b>Secondary Indicators (minimum of two required)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Surface Soil Cracks (B6)</li> <li><input type="checkbox"/> Drainage Patterns (B10)</li> <li><input type="checkbox"/> Moss Trim Lines (B16)</li> <li><input type="checkbox"/> Dry-Season Water Table (C2)</li> <li><input type="checkbox"/> Crayfish Burrows (C8)</li> <li><input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</li> <li><input type="checkbox"/> Stunted or Stressed Plants (D1)</li> <li><input checked="" type="checkbox"/> Geomorphic Position (D2)</li> <li><input type="checkbox"/> Shallow Aquitard (D3)</li> <li><input type="checkbox"/> Microtopographic Relief (D4)</li> <li><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</li> </ul>
---	--

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery

Remarks:  
 Rain overnight last night, wet conditions. Depression appears to be historical excavation many decades ago. Now partially wetland.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P1

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>18</u></td> <td>x 1 = <u>18</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>98</u></td> <td>(A) <u>178.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>1.82</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>18</u>	x 1 = <u>18</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>98</u>	(A) <u>178.00</u> (B)	Prevalence Index = B/A = <u>1.82</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>18</u>	x 1 = <u>18</u>																			
FACW species <u>80</u>	x 2 = <u>160</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>98</u>	(A) <u>178.00</u> (B)																			
Prevalence Index = B/A = <u>1.82</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )																				
1. <u>PHALARIS ARUNDINACEA</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>																	
2. <u>Schoenoplectus fluviatilis</u>	<u>15</u>	<u>N</u>	<u>OBL</u>																	
3. <u>Typha latifolia</u>	<u>3</u>	<u>N</u>	<u>OBL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
	<u>98.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)  
Wet meadow/Shallow marsh



Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P2  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Depression Side slope Local relief (concave, convex, none): Microtopography Slope %: 3-7  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.311301 Long: -88.319885 Datum: WGS84  
 Soil Map Unit Name: Orthents, loamy, undulating NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
---	--

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed. Depression appears to be historical excavation many decades ago. Now partially wetland.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P2

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>150</u> (A)</td> <td><u>585.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.9</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>150</u> (A)	<u>585.00</u> (B)	Prevalence Index = B/A = <u>3.9</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>15</u>	x 2 = <u>30</u>																			
FAC species <u>15</u>	x 3 = <u>45</u>																			
FACU species <u>90</u>	x 4 = <u>360</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>150</u> (A)	<u>585.00</u> (B)																			
Prevalence Index = B/A = <u>3.9</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definitions of Vegetation Strata:</b> <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
1. <u>Solidago canadensis</u>	<u>50</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>DAUCUS CAROTA</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>																	
3. <u>PHALARIS ARUNDINACEA</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>																	
4. <u>Verbena urticifolia</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>																	
5. <u>Cirsium arvense</u>	<u>10</u>	<u>N</u>	<u>FACU</u>																	
6. <u>Bromus inermis</u>	<u>10</u>	<u>N</u>	<u>UPL</u>																	
7. <u>Arctium minus</u>	<u>7</u>	<u>N</u>	<u>FACU</u>																	
8. <u>LONICERA X BELLA</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
9. <u>Symphotrichum pilosum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
10. <u>Erigeron canadensis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
11. <u>Sonchus oleraceus</u>	<u>5</u>	<u>N</u>	<u>FACU</u>																	
12. <u>Rosa multiflora</u>	<u>3</u>	<u>N</u>	<u>FACU</u>																	
	<u>150.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <u>  </u> No <u>  ✓  </u>																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)  
 Old field community

**SOIL**

Sampling Point P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	7.5YR	3/2	100					L	
12-24	10YR	3/1	98	7.5YR	3/3	2	C	M	SL

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<p><b>Hydric Soil Indicators:</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Iron Monosulfide (A18)</p> <p><input type="checkbox"/> Mesic Spodic (A17)</p> <p style="padding-left: 20px;"><b>(MLRA 144A, 145, 149B)</b></p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p>	<p><input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR R, MLRA 149B)</b></p> <p><input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR R, MLRA 149B)</b></p> <p><input type="checkbox"/> High Chroma Sands (S11) <b>(LRR K, L)</b></p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR K, L)</b></p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Marl (F10) <b>(LRR K, L)</b></p> <p><input type="checkbox"/> Red Parent Material (F21) <b>(MLRA 145)</b></p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b></p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b></p> <p><input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR K, L)</b> Thin</p> <p><input type="checkbox"/> Dark Surface (S9) <b>(LRR K, L)</b></p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR K, L, R)</b></p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149B)</b></p> <p><input type="checkbox"/> Red Parent Material (F21) <b>(outside MLRA 145)</b></p> <p><input type="checkbox"/> Very Shallow Dark Surface (F22)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p><b>Restrictive Layer (if observed):</b></p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p><b>Hydric Soil Present?</b>      Yes _____ No <input checked="" type="checkbox"/></p>
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Remarks:  
Historical excavation

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P3  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope %: 0-2  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.313488 Long: -88.321055 Datum: WGS84  
 Soil Map Unit Name: Pella silty clay loam, cool, 0 to 2 percent slopes NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. Near OSA signature area 1 in non-farmed area, representative of landscape position.

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed. Tile pump observed 200ft west of P3.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P3

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Pinus strobus</u>	20	Y	FACU	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)																
2. <u>Ulmus pumila</u>	3	N	FACU																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>23.0</u>	=Total Cover																		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer negundo</u>	7	Y	FAC	<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>14</u></td> <td>x 3 = <u>42</u></td> </tr> <tr> <td>FACU species <u>41</u></td> <td>x 4 = <u>164</u></td> </tr> <tr> <td>UPL species <u>100</u></td> <td>x 5 = <u>500</u></td> </tr> <tr> <td>Column Totals: <u>155</u> (A)</td> <td><u>706.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>4.55</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>14</u>	x 3 = <u>42</u>	FACU species <u>41</u>	x 4 = <u>164</u>	UPL species <u>100</u>	x 5 = <u>500</u>	Column Totals: <u>155</u> (A)	<u>706.00</u> (B)	Prevalence Index = B/A = <u>4.55</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>14</u>	x 3 = <u>42</u>																			
FACU species <u>41</u>	x 4 = <u>164</u>																			
UPL species <u>100</u>	x 5 = <u>500</u>																			
Column Totals: <u>155</u> (A)	<u>706.00</u> (B)																			
Prevalence Index = B/A = <u>4.55</u>																				
2. <u>Ulmus pumila</u>	1	N	FACU																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>8.0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Bromus inermis</u>	95	Y	UPL	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Solidago canadensis</u>	10	N	FACU																	
3. <u>Cirsium arvense</u>	7	N	FACU																	
4. <u>Euthamia graminifolia</u>	7	N	FAC																	
5. <u>Physalis heterophylla</u>	5	N	UPL																	
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	<u>124.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
	<u>0</u>	=Total Cover																		
<b>Hydrophytic Vegetation Present?</b>				Yes <u>  </u> No <u>  ✓  </u>																

Remarks: (Include photo numbers here or on a separate sheet.)  
 Old field community

**SOIL**

Sampling Point P3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix			Redox Features			Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type <sup>1</sup>		
0-5	7.5YR	3/2	100				L	No redox
5-15	10YR	3/1	60				SIL	Mixed matrix, no redox, soil dry
	10YR	4/3	40				SIL	
15-24	10YR	3/1	85				SICL	Mixed matrix, no redox, soil dry
	10YR	4/3	15				SICL	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Iron Monosulfide (A18)
- Mesic Spodic (A17)
- (MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)
- Red Parent Material (F21) (MLRA 145)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L) Thin
- Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Red Parent Material (F21) (outside MLRA 145)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P4  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope %: 0-2  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.313224 Long: -88.316920 Datum: WGS84  
 Soil Map Unit Name: Pella silty clay loam, cool, 0 to 2 percent slopes NWI classification: None Depicted

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
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Remarks: (Explain alternative procedures here or in a separate report.)  
 APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> FAC-Neutral Test (D5)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. OSA signature area 2, representative.

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed. Tile system thought to be present in this swale.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P4

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>1</u></td> <td>x 3 = <u>3</u></td> </tr> <tr> <td>FACU species <u>7</u></td> <td>x 4 = <u>28</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>8</u> (A)</td> <td><u>31.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.88</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>7</u>	x 4 = <u>28</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>8</u> (A)	<u>31.00</u> (B)	Prevalence Index = B/A = <u>3.88</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>1</u>	x 3 = <u>3</u>																			
FACU species <u>7</u>	x 4 = <u>28</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>8</u> (A)	<u>31.00</u> (B)																			
Prevalence Index = B/A = <u>3.88</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>  </u> No <u>✓</u>																
1. <u>Acalypha rhomboidea</u>	<u>7</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>RHAMNUS CATHARTICA</u>	<u>1</u>	<u>N</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
	<u>8.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10ft tall, healthy. Weeds present.

**SOIL**

Sampling Point P4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)	Matrix			Redox Features				Texture	Remarks	
	Color (moist)		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			
0-14	10YR	3/2	100					L	No redox	
14-20	10YR	3/2	97	10YR	3/3	3	C	M	Faint redox w//20% stones	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Iron Monosulfide (A18)
- Mesic Spodic (A17)
- (MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)
- Red Parent Material (F21) (MLRA 145)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L) Thin
- Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Red Parent Material (F21) (outside MLRA 145)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

Auger refusal at 20in due to stones.

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P5  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope %: 0-2  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.313173 Long: -88.316962 Datum: WGS84  
 Soil Map Unit Name: Brenton silt loam, 0 to 2 percent slopes NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <ul style="list-style-type: none"> <li><input type="checkbox"/> Surface Water (A1)</li> <li><input type="checkbox"/> High Water Table (A2)</li> <li><input type="checkbox"/> Saturation (A3)</li> <li><input type="checkbox"/> Water Marks (B1)</li> <li><input type="checkbox"/> Sediment Deposits (B2)</li> <li><input type="checkbox"/> Drift Deposits (B3)</li> <li><input type="checkbox"/> Algal Mat or Crust (B4)</li> <li><input type="checkbox"/> Iron Deposits (B5)</li> <li><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</li> <li><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</li> <li><input type="checkbox"/> Water-Stained Leaves (B9)</li> <li><input type="checkbox"/> Aquatic Fauna (B13)</li> <li><input type="checkbox"/> Marl Deposits (B15)</li> <li><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</li> <li><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</li> <li><input type="checkbox"/> Presence of Reduced Iron (C4)</li> <li><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</li> <li><input type="checkbox"/> Thin Muck Surface (C7)</li> <li><input type="checkbox"/> Other (Explain in Remarks)</li> </ul>	<b>Secondary Indicators (minimum of two required)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Surface Soil Cracks (B6)</li> <li><input type="checkbox"/> Drainage Patterns (B10)</li> <li><input type="checkbox"/> Moss Trim Lines (B16)</li> <li><input type="checkbox"/> Dry-Season Water Table (C2)</li> <li><input type="checkbox"/> Crayfish Burrows (C8)</li> <li><input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</li> <li><input type="checkbox"/> Stunted or Stressed Plants (D1)</li> <li><input type="checkbox"/> Geomorphic Position (D2)</li> <li><input type="checkbox"/> Shallow Aquitard (D3)</li> <li><input type="checkbox"/> Microtopographic Relief (D4)</li> <li><input type="checkbox"/> FAC-Neutral Test (D5)</li> </ul>
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. OSA signature area 3, representative.

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed. Tile system thought to be present in this swale.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P5

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>10</u> (A)</td> <td><u>30.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.0</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>10</u> (A)	<u>30.00</u> (B)	Prevalence Index = B/A = <u>3.0</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>10</u> (A)	<u>30.00</u> (B)																			
Prevalence Index = B/A = <u>3.0</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																
1. <u>Acalypha rhomboidea</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Panicum dichotomiflorum</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>10.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10ft tall, healthy. Weeds present.

**SOIL**

Sampling Point P5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-15	7.5YR	3/2	100					SIL	No redox
15-24	10YR	3/2	98	10YR	3/3	2	C	M	Faint redox

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Iron Monosulfide (A18)
- Mesic Spodic (A17)  
**(MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- High Chroma Sands (S11) **(LRR K, L)**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR K, L)**
- Red Parent Material (F21) **(MLRA 145)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Polyvalue Below Surface (S8) **(LRR K, L)** Thin
- Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Red Parent Material (F21) **(outside MLRA 145)**
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P6  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope %: 3-7  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.310882 Long: -88.317541 Datum: WGS84  
 Soil Map Unit Name: Griswold loam, 4 to 6 percent slopes, eroded NWI classification: None Depicted

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>W-2</u>
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Remarks: (Explain alternative procedures here or in a separate report.)  
 APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. OSA signature area 4, representative.

Remarks:  
 Rain overnight last night, wet conditions. D1 hydrology indicator per OSA.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P6

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>7</u> x 2 = <u>14</u> FAC species <u>1</u> x 3 = <u>3</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>13</u> (A) <u>37.00</u> (B) Prevalence Index = B/A = <u>2.85</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				
1. <u>Panicum dichotomiflorum</u>	<u>7</u>	<u>Y</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Acalypha rhomboidea</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	
3. <u>RHAMNUS CATHARTICA</u>	<u>1</u>	<u>N</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>13.0</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b> <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10ft tall, healthy. Weeds present.

**SOIL**

Sampling Point P6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)	Matrix			Redox Features				Texture	Remarks	
	Color (moist)		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			
0-6	7.5YR	3/2	100					SIL	No redox	
6-14	10YR	4/2	93	10YR	4/4	7	C	M	SL	
14-24	7.5YR	5/4	90	7.5YR	5/6	10	C	M	SCL	W/15% gravel-stones

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Iron Monosulfide (A18)
- Mesic Spodic (A17)
- (MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- High Chroma Sands (S11) **(LRR K, L)**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR K, L)**
- Red Parent Material (F21) **(MLRA 145)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Polyvalue Below Surface (S8) **(LRR K, L)** Thin
- Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Red Parent Material (F21) **(outside MLRA 145)**
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P7  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Sideslope Local relief (concave, convex, none): Concave Slope %: 3-7  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.311002 Long: -88.315921 Datum: WGS84  
 Soil Map Unit Name: Ringwood silt loam, 2 to 4 percent slopes NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. Outside OSA signature area 5.

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed. Tile system thought to be present in nearby swales.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P7

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr> <tr><td>FACW species <u>7</u></td><td>x 2 = <u>14</u></td></tr> <tr><td>FAC species <u>0</u></td><td>x 3 = <u>0</u></td></tr> <tr><td>FACU species <u>7</u></td><td>x 4 = <u>28</u></td></tr> <tr><td>UPL species <u>5</u></td><td>x 5 = <u>25</u></td></tr> <tr><td>Column Totals: <u>19</u></td><td>(A) <u>67.00</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.53</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>7</u>	x 2 = <u>14</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>7</u>	x 4 = <u>28</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>19</u>	(A) <u>67.00</u> (B)	Prevalence Index = B/A = <u>3.53</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>7</u>	x 2 = <u>14</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>7</u>	x 4 = <u>28</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>19</u>	(A) <u>67.00</u> (B)																			
Prevalence Index = B/A = <u>3.53</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )																				
1. <u>Acalypha rhomboidea</u>	<u>7</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Panicum dichotomiflorum</u>	<u>7</u>	<u>Y</u>	<u>FACW</u>																	
3. <u>Physalis heterophylla</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>19.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

     2 - Dominance Test is >50%

     3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes           No   ✓  

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10-11ft tall, healthy. Weeds present.



Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P8  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope %: 0-2  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.311013 Long: -88.315508 Datum: WGS84  
 Soil Map Unit Name: Ringwood silt loam, 2 to 4 percent slopes NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>W-3</u>
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <ul style="list-style-type: none"> <li><input type="checkbox"/> Surface Water (A1)</li> <li><input type="checkbox"/> High Water Table (A2)</li> <li><input type="checkbox"/> Saturation (A3)</li> <li><input type="checkbox"/> Water Marks (B1)</li> <li><input type="checkbox"/> Sediment Deposits (B2)</li> <li><input type="checkbox"/> Drift Deposits (B3)</li> <li><input type="checkbox"/> Algal Mat or Crust (B4)</li> <li><input type="checkbox"/> Iron Deposits (B5)</li> <li><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</li> <li><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</li> <li><input type="checkbox"/> Water-Stained Leaves (B9)</li> <li><input type="checkbox"/> Aquatic Fauna (B13)</li> <li><input type="checkbox"/> Marl Deposits (B15)</li> <li><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</li> <li><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</li> <li><input type="checkbox"/> Presence of Reduced Iron (C4)</li> <li><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</li> <li><input type="checkbox"/> Thin Muck Surface (C7)</li> <li><input type="checkbox"/> Other (Explain in Remarks)</li> </ul>	<b>Secondary Indicators (minimum of two required)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Surface Soil Cracks (B6)</li> <li><input type="checkbox"/> Drainage Patterns (B10)</li> <li><input type="checkbox"/> Moss Trim Lines (B16)</li> <li><input type="checkbox"/> Dry-Season Water Table (C2)</li> <li><input type="checkbox"/> Crayfish Burrows (C8)</li> <li><input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</li> <li><input checked="" type="checkbox"/> Stunted or Stressed Plants (D1)</li> <li><input type="checkbox"/> Geomorphic Position (D2)</li> <li><input type="checkbox"/> Shallow Aquitard (D3)</li> <li><input type="checkbox"/> Microtopographic Relief (D4)</li> <li><input type="checkbox"/> FAC-Neutral Test (D5)</li> </ul>
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. OSA signature area 5.

Remarks:  
 Rain overnight last night, wet conditions. D1 hydrology indicator per OSA. Possible tile system present.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P8

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.67</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u> =Total Cover			<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>20</u> (A)</td> <td><u>60.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.0</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>20</u> (A)	<u>60.00</u> (B)	Prevalence Index = B/A = <u>3.0</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
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UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>20</u> (A)	<u>60.00</u> (B)																			
Prevalence Index = B/A = <u>3.0</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>0</u> =Total Cover																			
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																
1. <u>Echinochloa crus-galli</u>	<u>7</u>	<u>Y</u>	<u>FAC</u>																	
2. <u>Acalypha rhomboidea</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>																	
3. <u>Panicum dichotomiflorum</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>																	
4. <u>Setaria pumila</u>	<u>3</u>	<u>N</u>	<u>FAC</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
	<u>20.0</u> =Total Cover																			
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u> =Total Cover																			

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10ft tall, healthy. Weeds present.

**SOIL**

Sampling Point P8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)	Matrix			Redox Features				Texture	Remarks	
	Color (moist)		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			
0-7	7.5YR	3/2	97	10YR	3/3	3	C	M	SIL	Faint redox
7-14	10YR	4/2	90	10YR	4/4	10	C	M	SICL	
14-24	10YR	5/2	85	10YR	5/6	15	C	M	SIC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Iron Monosulfide (A18)
- Mesic Spodic (A17)
- (MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)
- Red Parent Material (F21) (MLRA 145)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L) Thin
- Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Red Parent Material (F21) (outside MLRA 145)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P9  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Convex Slope %: 3-7  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.311011 Long: -88.314976 Datum: WGS84  
 Soil Map Unit Name: Ringwood silt loam, 2 to 4 percent slopes NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. OSA signature area 5.

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed. Tile system thought to be present in nearby swales.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P9

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr> <tr><td>FACW species <u>3</u></td><td>x 2 = <u>6</u></td></tr> <tr><td>FAC species <u>0</u></td><td>x 3 = <u>0</u></td></tr> <tr><td>FACU species <u>10</u></td><td>x 4 = <u>40</u></td></tr> <tr><td>UPL species <u>5</u></td><td>x 5 = <u>25</u></td></tr> <tr><td>Column Totals: <u>18</u></td><td>(A) <u>71.00</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.94</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>3</u>	x 2 = <u>6</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>18</u>	(A) <u>71.00</u> (B)	Prevalence Index = B/A = <u>3.94</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>3</u>	x 2 = <u>6</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>18</u>	(A) <u>71.00</u> (B)																			
Prevalence Index = B/A = <u>3.94</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )																				
1. <u>Acalypha rhomboidea</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>																	
2. <u>Physalis heterophylla</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>																	
3. <u>Panicum dichotomiflorum</u>	<u>3</u>	<u>N</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>18.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

     2 - Dominance Test is >50%

     3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes           No   ✓  

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10-11ft tall, healthy. Weeds present.

**SOIL**

Sampling Point P9

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	7.5YR 4/2	100					SIL	No redox
9-15	7.5YR 4/2	97	7.5YR 4/3	3	C	M	SICL	Faint redox
15-24	10YR 5/3	97	10YR 5/4	3	C	M	SIC	Faint redox

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Iron Monosulfide (A18)
- Mesic Spodic (A17)  
**(MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- High Chroma Sands (S11) **(LRR K, L)**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR K, L)**
- Red Parent Material (F21) **(MLRA 145)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Polyvalue Below Surface (S8) **(LRR K, L)** Thin
- Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Red Parent Material (F21) **(outside MLRA 145)**
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P10  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope %: 0-2  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.311011 Long: -88.314252 Datum: WGS84  
 Soil Map Unit Name: Ringwood silt loam, 2 to 4 percent slopes NWI classification: None Depicted  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>W-4</u>
Remarks: (Explain alternative procedures here or in a separate report.) APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. OSA signature area 5, representative.

Remarks:  
 Rain overnight last night, wet conditions. D1 hydrology indicator per OSA. Possible tile system present.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P10

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.67</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>7</u></td> <td>x 2 = <u>14</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>15</u> (A)</td> <td><u>41.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.73</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>7</u>	x 2 = <u>14</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>15</u> (A)	<u>41.00</u> (B)	Prevalence Index = B/A = <u>2.73</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
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UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>15</u> (A)	<u>41.00</u> (B)																			
Prevalence Index = B/A = <u>2.73</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																
1. <u>Panicum dichotomiflorum</u>	<u>7</u>	<u>Y</u>	<u>FACW</u>																	
2. <u>Echinochloa crus-galli</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>																	
3. <u>Acalypha rhomboidea</u>	<u>3</u>	<u>Y</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>15.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10ft tall, healthy. Weeds present.



Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P11  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Sideslope Local relief (concave, convex, none): None Slope %: 3-7  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.311545 Long: -88.312644 Datum: WGS84  
 Soil Map Unit Name: Ringwood silt loam, 2 to 4 percent slopes NWI classification: None Depicted

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
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Remarks: (Explain alternative procedures here or in a separate report.)  
 APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
---	--

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. Outside OSA signature area 5.

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed. Tile system thought to be present in nearby swales.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P11

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr> <tr><td>FACW species <u>10</u></td><td>x 2 = <u>20</u></td></tr> <tr><td>FAC species <u>0</u></td><td>x 3 = <u>0</u></td></tr> <tr><td>FACU species <u>7</u></td><td>x 4 = <u>28</u></td></tr> <tr><td>UPL species <u>5</u></td><td>x 5 = <u>25</u></td></tr> <tr><td>Column Totals: <u>22</u></td><td>(A) <u>73.00</u> (B)</td></tr> <tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.32</u></td></tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>7</u>	x 4 = <u>28</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>22</u>	(A) <u>73.00</u> (B)	Prevalence Index = B/A = <u>3.32</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>10</u>	x 2 = <u>20</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>7</u>	x 4 = <u>28</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>22</u>	(A) <u>73.00</u> (B)																			
Prevalence Index = B/A = <u>3.32</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )				<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>  ✓  </u>																
1. <u>Panicum dichotomiflorum</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>																	
2. <u>Acalypha rhomboidea</u>	<u>7</u>	<u>Y</u>	<u>FACU</u>																	
3. <u>Amaranthus retroflexus</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>22.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10-11ft tall, healthy. Weeds present.

**SOIL**

Sampling Point P11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)	Matrix			Redox Features				Texture	Remarks	
	Color (moist)		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			
0-7	7.5YR	4/2	100					SICL	No redox	
7-12	7.5YR	4/2	98	7.5YR	4/3	2	C	M	SICL	Faint redox
12-24	10YR	5/3	95	10YR	5/6	5	C	M	SIC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Iron Monosulfide (A18)
- Mesic Spodic (A17)  
**(MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- High Chroma Sands (S11) **(LRR K, L)**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR K, L)**
- Red Parent Material (F21) **(MLRA 145)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Polyvalue Below Surface (S8) **(LRR K, L)** Thin
- Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Red Parent Material (F21) **(outside MLRA 145)**
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

Project/Site: 20251635 McHenry Solar Farm City/County: McHenry County Sampling Date: 2025-10-07  
 Applicant/Owner: Surya Powered State: Illinois Sampling Point: P12  
 Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 08 T044N R008E  
 Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope %: 3-7  
 Subregion (LRR or MLRA): LRR L, MLRA 95 Lat: 42.312453 Long: -88.312706 Datum: WGS84  
 Soil Map Unit Name: 148A (non-hydric) NWI classification: None Depicted

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
---	---

Remarks: (Explain alternative procedures here or in a separate report.)  
 APT analysis indicates climatic conditions are in the normal range. Agricultural field planted in corn, not NC.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> FAC-Neutral Test (D5)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 NAIP and county historical imagery. OSA signature area 6.

Remarks:  
 Rain overnight last night, wet conditions. No wetland hydrology indicators observed.

**VEGETATION** – Use scientific names of plants.

Sampling Point: P12

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>6</u></td> <td>x 4 = <u>24</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>18</u> (A)</td> <td><u>54.00</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.0</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>6</u>	x 4 = <u>24</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>18</u> (A)	<u>54.00</u> (B)	Prevalence Index = B/A = <u>3.0</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>10</u>	x 2 = <u>20</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>6</u>	x 4 = <u>24</u>																			
UPL species <u>2</u>	x 5 = <u>10</u>																			
Column Totals: <u>18</u> (A)	<u>54.00</u> (B)																			
Prevalence Index = B/A = <u>3.0</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )																				
1. <u>Panicum dichotomiflorum</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>																	
2. <u>Acalypha rhomboidea</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>																	
3. <u>THLASPI ARVENSE</u>	<u>2</u>	<u>N</u>	<u>UPL</u>																	
4. <u>Amaranthus retroflexus</u>	<u>1</u>	<u>N</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>18.0</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>0</u>	=Total Cover																		

**Hydrophytic Vegetation Indicators:**

   1 - Rapid Test for Hydrophytic Vegetation

   2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

   4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes       No

Remarks: (Include photo numbers here or on a separate sheet.)  
 Corn crop not yet harvested, 10-11ft tall, healthy. Weeds present.





Surya Powered LLC  
McHenry Solar Farm – McHenry Co.  
Project #: 20251635  
November 12, 2025

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## Appendix D | Site Photographs



Photo #1 Sample point P1



Photo #2 Sample point P1



Photo #3 Sample point P1



Photo #4 Sample point P1



Photo #5 Sample point P2



Photo #6 Sample point P2



Photo #7 Sample point P2



Photo #8 Sample point P2



Photo #9 Sample point P3



Photo #10 Sample point P3



Photo #11 Sample point P3



Photo #12 Sample point P3



Photo #13 Sample point P4



Photo #14 Sample point P4

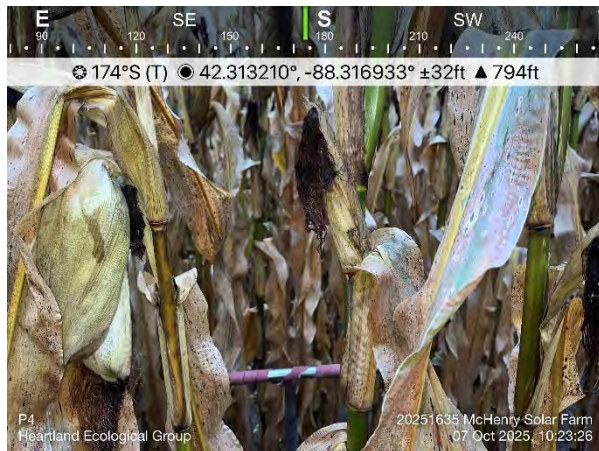


Photo #15 Sample point P4



Photo #16 Sample point P4



Photo #17 Sample point P5

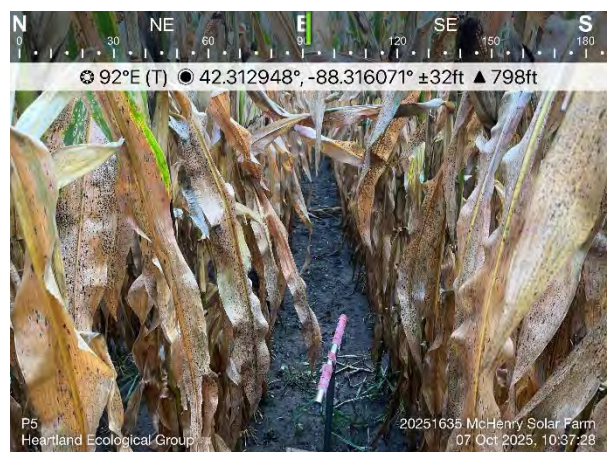
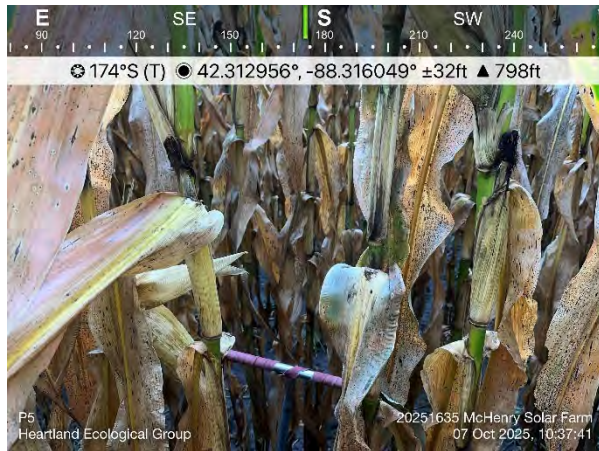


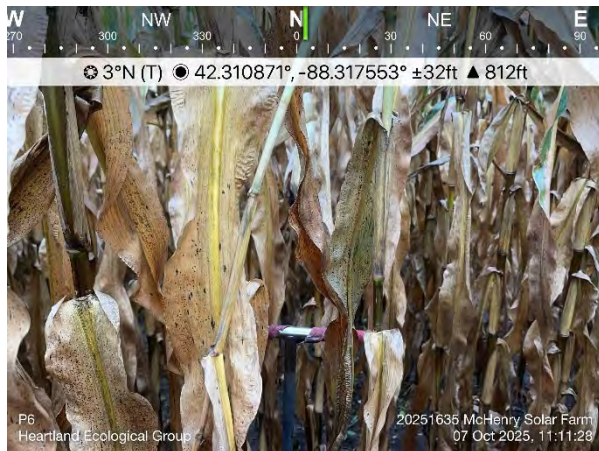
Photo #18 Sample point P5



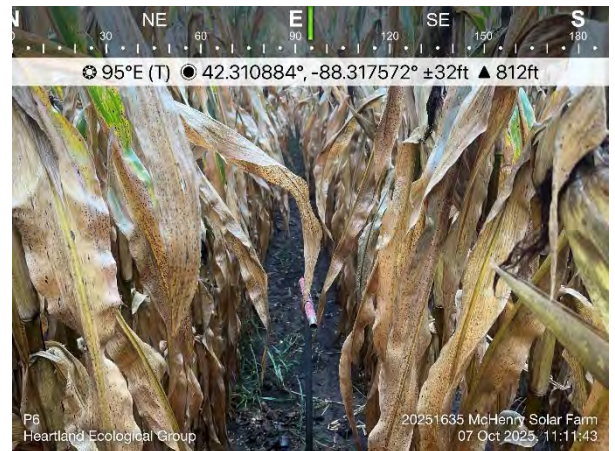
**Photo #19** Sample point P5



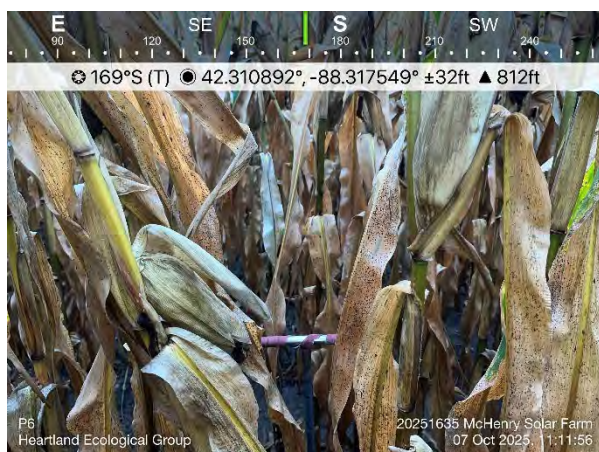
**Photo #20** Sample point P5



**Photo #21** Sample point P6



**Photo #22** Sample point P6



**Photo #23** Sample point P6



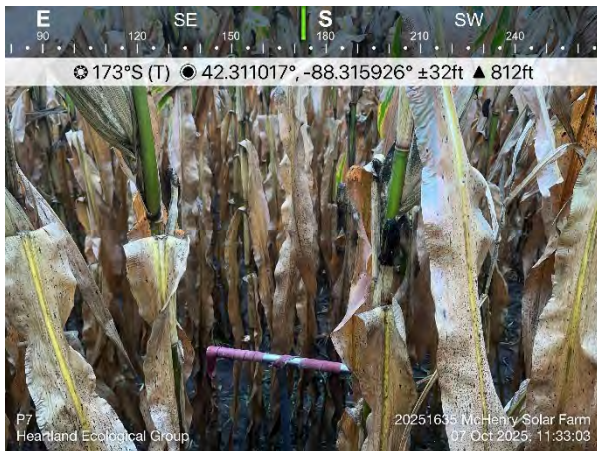
**Photo #24** Sample point P6



**Photo #25** Sample point P7



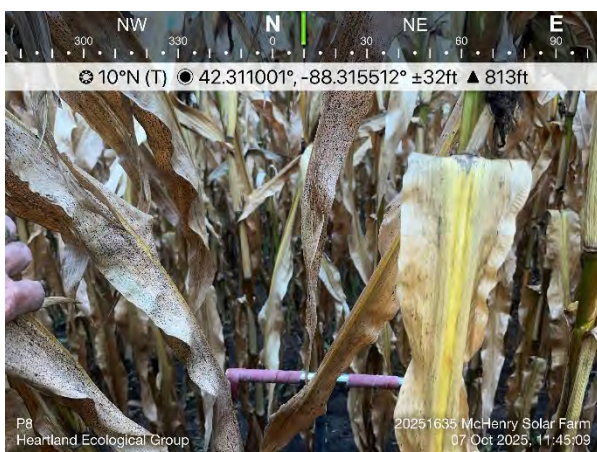
**Photo #26** Sample point P7



**Photo #27** Sample point P7



**Photo #28** Sample point P7



**Photo #29** Sample point P8



**Photo #30** Sample point P8



Photo #31 Sample point P8

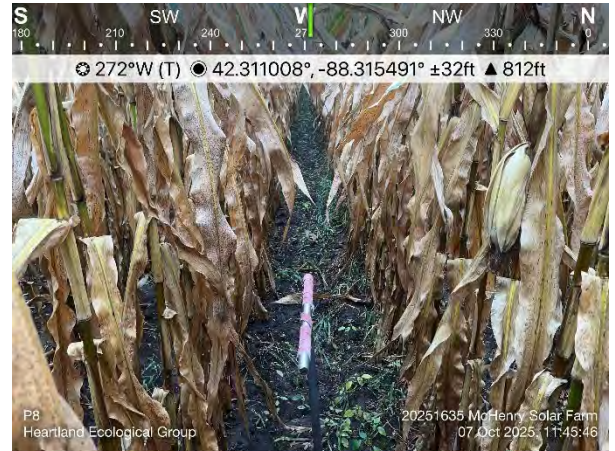


Photo #32 Sample point P8

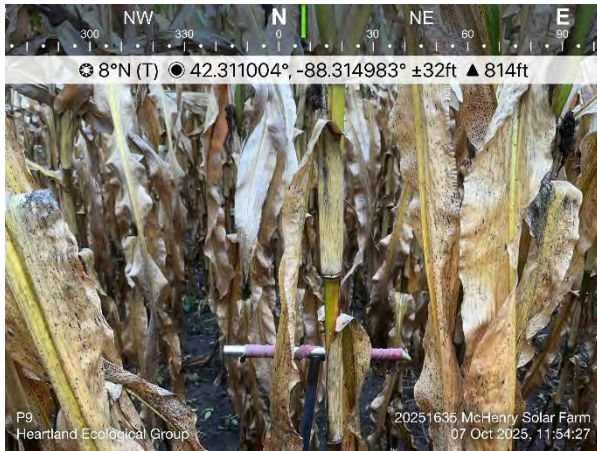


Photo #33 Sample point P9



Photo #34 Sample point P9

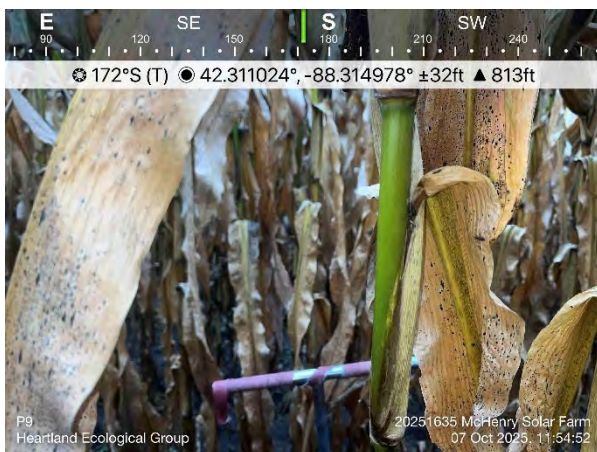


Photo #35 Sample point P9

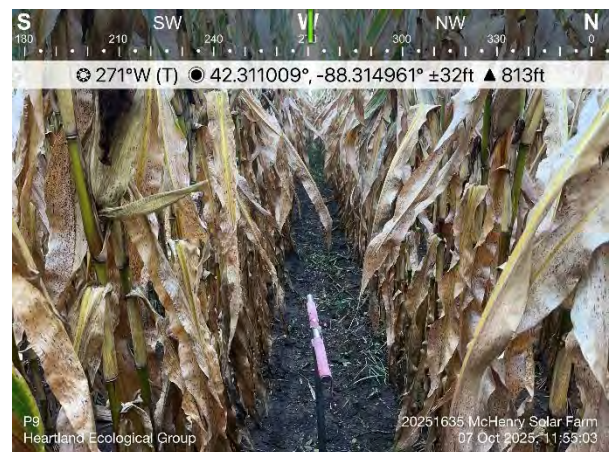
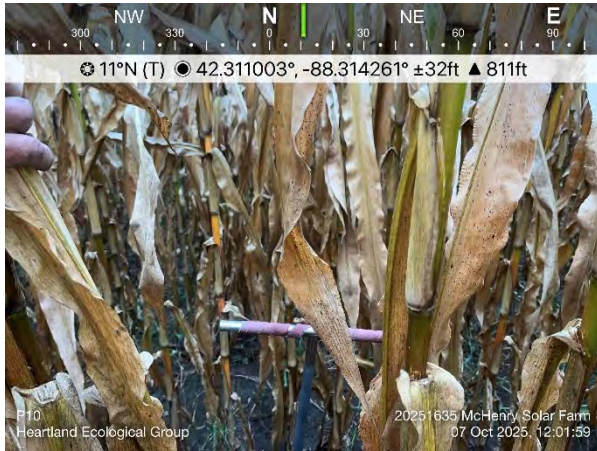


Photo #36 Sample point P9



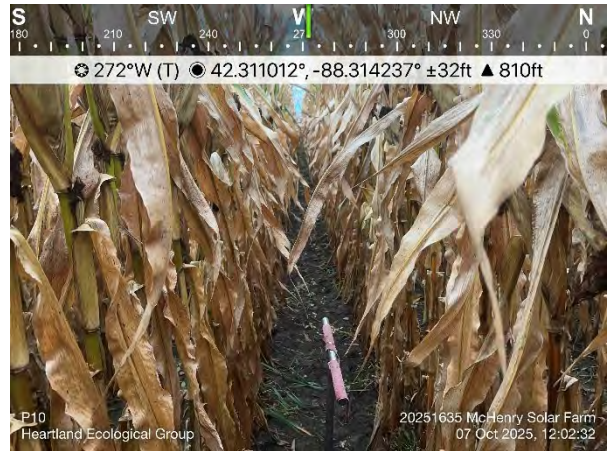
**Photo #37** Sample point P10



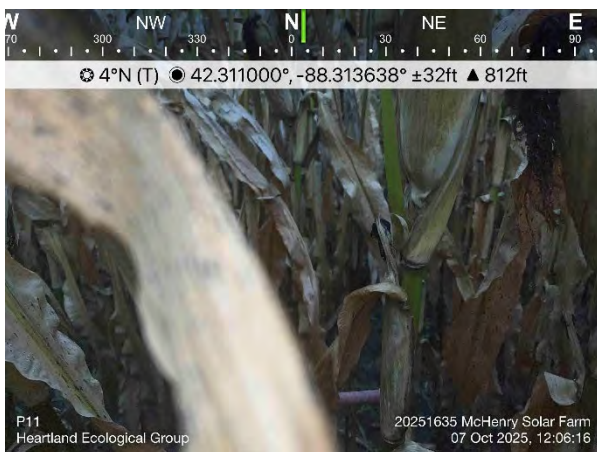
**Photo #38** Sample point P10



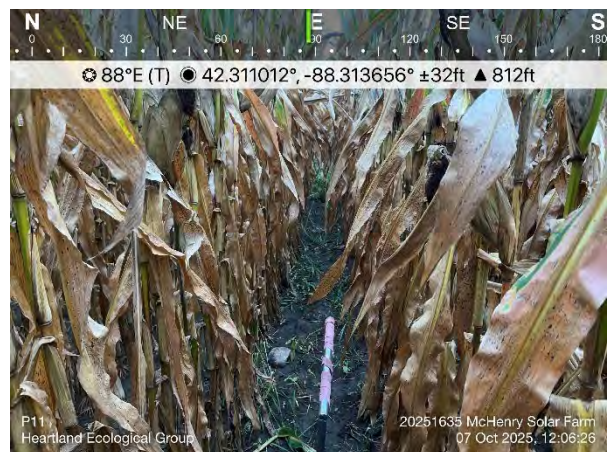
**Photo #39** Sample point P10



**Photo #40** Sample point P10



**Photo #41** Sample point P11



**Photo #42** Sample point P11



Photo #43 Sample point P11



Photo #44 Sample point P11



Photo #45 Sample point P12

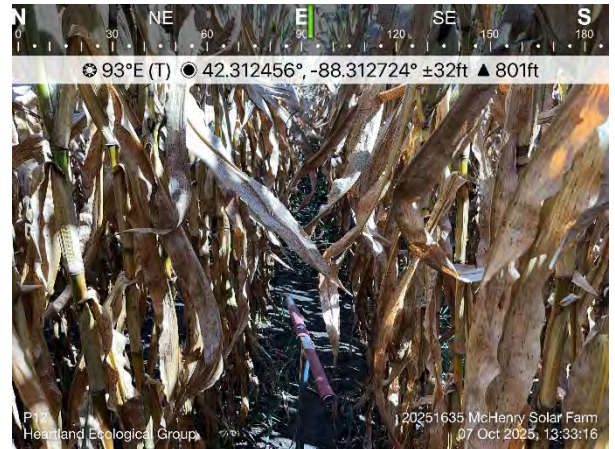


Photo #46 Sample point P12

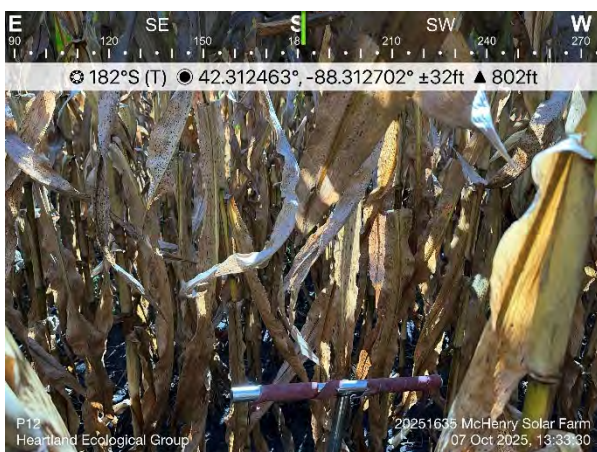


Photo #47 Sample point P12



Photo #48 Sample point P12



Surya Powered LLC  
McHenry Solar Farm – McHenry Co.  
Project #: 20251635  
November 12, 2025

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## Appendix E | Floristic Quality Assessment

## Wet Meadow-Shallow Marsh

10/7/2025

### McHenry Solar Farm

Nunda Township  
McHenry County, IL

FQA DB Region: Flora of the Chicago Region  
FQA DB Publication Year: 2017  
FQA DB Description: Flora of the Chicago Region UFQA Database. 2018. Kenneth Johnson. [As per Flora of the Chicago Region: A Floristic and Ecological Synthesis. 2017. Gerould Wilhelm and Laura Rericha. Indiana Academy of Science. Indianapolis, IN.]

Practitioner: Eric C. Parker, SPWS  
Private/Public: Private

#### Conservatism-Based Metrics:

Total Mean C: 1.9  
Native Mean C: 2.4  
Total FQI: 6  
Native FQI: 6.8  
Adjusted FQI: 21.5  
% C value 0: 40  
% C value 1-3: 40  
% C value 4-6: 20  
% C value 7-10: 0  
Native Tree Mean C: 2.5  
Native Shrub Mean C: 2  
Native Herbaceous Mean C: 2.4

#### Species Richness:

Total Species: 10  
Native Species: 8 80%  
Non-native Species: 2 20%

#### Species Wetness:

Mean Wetness: -1.1  
Native Mean Wetness: -1.4

#### Physiognomy Metrics:

Tree: 2 20%  
Shrub: 1 10%  
Vine: 0 0%  
Forb: 5 50%  
Grass: 1 10%  
Sedge: 1 10%  
Rush: 0 0%  
Fern: 0 0%  
Bryophyte: 0 0%

#### Duration Metrics:

Annual: 1 10%  
Perennial: 9 90%  
Biennial: 0 0%  
Native Annual: 1 10%  
Native Perennial: 7 70%  
Native Biennial: 0 0%

#### Species:

Scientific Name	Family	Acronym	Native?	C	W	Physiognomy	Duration	Common Name
<i>Acer negundo</i>	Sapindaceae	ACENEG	native	0	0	tree	perennial	boxelder
<i>Alisma triviale</i>	Alismataceae	ALITRI	native	3	-2	forb	perennial	large-flowered water plantain
<i>Bolboschoenus fluviatilis</i>	Cyperaceae	BOLFLU	native	3	-2	sedge	perennial	river bulrush
<i>Cirsium arvense</i>	Asteraceae	CIRARV	non-native	0	1	forb	perennial	field thistle
<i>Persicaria pensylvanica</i>	Polygonaceae	PERPEN	native	0	-1	forb	annual	pinkweed
<i>Phalaris arundinacea</i>	Poaceae	PHAARA	non-native	0	-1	grass	perennial	reed canary grass
<i>Salix interior</i>	Salicaceae	SALINT	native	2	-1	shrub	perennial	sandbar willow
<i>Salix nigra</i>	Salicaceae	SALNIG	native	5	-2	tree	perennial	black willow
<i>Typha latifolia</i>	Typhaceae	TYPLAT	native	5	-2	forb	perennial	broad-leaved cattail
<i>Urtica gracilis</i>	Urticaceae	URTGRA	native	1	-1	forb	perennial	tall nettle



Surya Powered LLC  
McHenry Solar Farm – McHenry Co.  
Project #: 20251635  
November 12, 2025

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## Appendix F | Delineator Qualifications



## **Eric C. Parker, SPWS**

Principal Scientist  
506 Springdale Street  
Mount Horeb, WI 53572  
eric@heartlandecological.com  
(414) 380-0269



Mr. Parker is a Senior Professional Wetland Scientist and Professionally Assured Wetland Delineator in Wisconsin with 35 years of experience assisting public and private clientele. He has completed wetland projects in other states including IL, IN, OH, MI, ND, MO, PA, TX, MD, VA, and NC. His work has supported thousands of institutional, commercial, utility, residential, industrial & transportation projects. Mr. Parker's natural resource specialties include botanical surveys, wetland science, restoration and mitigation, and environmental corridor mapping. He has a widespread understanding of the scientific, technical, and regulatory aspects of natural resources projects. His interests also include floristic quality assessment (FQA) and wetness categorization of plant species.

Mr. Parker's experience includes the following: Botanical / Biological Surveys and Natural Resource Inventories; Rare Species Surveys, Conservation Plans and Monitoring; Wetland Determination, Delineation and Functional Assessment; Wetland Exemptions; Environmental Corridor Determinations/Mapping; Wetland Restoration, Mitigation, Banking and Monitoring; Habitat Restoration, Wildlife Surveys, SCAT surveys, Environmental Assessments; Local, state, federal permit applications; Expert Witness testimony; and Regulatory permit compliance.

## **Education**

BS, Watershed Management, Soils Minor  
University of WI - Stevens Point, 1983

Wetland Ecosystems (including delineation & assessment), USEPA Graduate School Washington DC, 1988

Field Oriented Wetland Delineation Course (1987 Corps Manual) Wetlands Training Institute (WTI) St. Paul, MN, 1994

Basic Wetland Delineation Training Wisconsin Dept. of Administration Waukesha, WI, 1997

Vegetation Description, UWM Cedarburg Bog Field Station, Saukville, WI, 1998

Advanced Wetland Delineation, U. of WI - La Crosse, Bayfield County, WI, 2001

Critical Methods in Wetland Delineation, University of WI - La Crosse Continuing Education and Extension, Madison, WI, 2006, 2008, 2010, 2014, 2016-2020

Mosses ID & Ecology, UWM Cedarburg Bog Field Station, Saukville, WI, 1998

Sedges ID & Ecology, UWM Cedarburg Bog Field Station, Saukville, WI, 2002, 2006, 2010

Grasses ID & Ecology, UWM Cedarburg Bog Field Station, Saukville, WI, 1998

## **Registrations**

Senior Professional Wetland Scientist #838, (SPWS), Society of Wetland Scientists Professional Certification Program, 1995-current

Certified Wetland Scientist #C-058, (CWS), Stormwater Management Commission Lake County, IL, 2002-current

Qualified Wetland Review Specialist #W-057, (QWRS), Kane County, IL, 2006-current



## Project Experience

### Wetland Delineation & Regulatory Support

#### 2022 Wetland Delineations, Exemption Submittals, and Permitting (104 sites)

Capitol Dr Property, Waukesha Co., WI (Jan); Puetz Rd Property, Milwaukee Co., WI (Jan); Glas Driveway Wetlands and GP, Kenosha Co., (Mar); 19555 W Lincoln Ave GP, Waukesha Co., WI (Mar); Northern Oaks Subd GP-AWER, Waukesha Co., WI (Mar); Workman Properties, Waukesha Co., WI (Apr); 5732 W Rawson Av, Milwaukee Co., WI (Apr); 2705 West Rd, Racine Co., WI (Apr); CTH CW Site, Dodge Co., WI (Apr); 4-Mile Rd Property, Racine Co., WI (Apr); Kurtze Ln Property, Waukesha Co., WI (Apr); 128<sup>th</sup> St Parcel, Kenosha Co., WI (Apr); Thomas Property Wetlands-PEC-Navigability, Waukesha Co., WI (Apr); Ament Property, Racine Co., WI (Apr); W3970 South Shore Dr, Walworth Co., WI (Apr); N2280 Temperance Tr, Walworth Co., WI (Apr); S Clark St Parcel, Dodge Co., WI (Apr); Deer Haven GC, Waukesha Co., WI (May); Petrie Rd 7.5 Ac Parcel, Walworth Co., WI (Apr); 5.5Ac Parcel Mukwonago, Waukesha Co., WI (Apr); S107 W16311 Loomis Rd Parcel, Waukesha Co., WI (Apr); CTH A & USH 12 Property, Walworth Co., WI (Apr); Cape Crossing NFE, Milwaukee Co., WI (Apr); Teipner Parcel, Waukesha Co., WI (Apr); Lichner Parcel, Waukesha Co., WI (Apr); Biocut Systems Site AWER, Waukesha Co., WI (Apr); Spring St Parcels, Racine Co., WI (May); US41 Corridor, Waukesha Co., WI (Apr); Reddelien Rd Parcel, Waukesha Co., WI (May); Watertown Rd Property, Waukesha Co., WI (May); 10027 Camelot Dr, Racine Co., WI (May); Koller Property, Ozaukee Co., WI (May); Altschaefl Property, Waukesha Co., WI (May); Pipito Property Pond, Dodge Co., WI (May); Kenora Rd Parcels, Waukesha Co., WI (May); Moorland & Greenfield Wetlands-AWER, Waukesha County, WI (May); Alliant Edgewater GS, Sheboygan Co., WI (May); Arbet North Parcel, Kenosha Co., WI (May); Pleasant Prairie Police Station, Kenosha Co., WI (May); 3<sup>rd</sup> Ave Pleasant Prairie Site, Kenosha Co., WI (May); 10766 N Torrey Dr Property, Ozaukee Co., WI (Jun); Kolnick Parcel, Kenosha Co., WI (Jun); Gateway Dr Watertown, Jefferson Co., WI (Jun); Green Bay Gardens Site, Kenosha Co., WI (Jun); DuCharme Property Wetlands-PEC, Waukesha Co., WI (Jun); 2301 Lakeshore Dr. GP-Tree Survey, Ozaukee Co., WI (Jun); 641 Drexel Wetlands-GP, Milwaukee Co., WI (Jun); Quigley Farm, Washington Co., WI (Jun); Big Bend Business Park, Waukesha Co., WI (Jun); Lad Lake Property, Waukesha Co., WI (Jun); Pleasant Prairie PP Utility Corridor, Kenosha Co., WI (Jul); Pleasant Prairie Fire Station 3, Kenosha Co., WI (Jul); CTH H Parcels, Walworth Co., WI (Jul); Oakwood Rd Parcels, Milwaukee Co., WI (Jul); Big Bend Rd Property, Waukesha Co., WI (Jul); Heartland Communities, Racine Co., WI (Jul); Leo Living Bristol Wetlands-PEC, Kenosha Co., WI (Jul); Stream Conservation Union Grove, Racine Co., WI (Jul); 8979 S 42<sup>nd</sup> St Franklin, Milwaukee Co., WI (Jul); 2205 Silvernail Rd, Waukesha Co., WI (Jul); East Wolf Run Mukwonago, Waukesha Co., WI (Jul); 1302 Roundtable Dr, Racine Co., WI (Jul); Corporation Parcel Dover, Racine Co., WI (Jul); 11925 W Lake Park Dr, Milwaukee Co., WI (Jul); 17905 W Capitol Dr Parcel, Waukesha Co., WI (Jul); Mosconi West Property, Kenosha Co., WI (Jul); Promise Builders Site, Kenosha Co., WI (Jul); Highland Dr Menomonee Falls Botanical Survey, Waukesha Co., WI (Aug); METRO RDF Expansion, Milwaukee Co., WI (Aug); 5.53 Ac Mukwonago Site, Waukesha Co., WI (Aug); Northstar Beloit Site, Rock Co., WI (Aug); Wirth Farm PEC-AWER-Tree Survey, Ozaukee Co., WI (Aug); Olympia Fields Wetlands-AWER, Waukesha Co., WI (Aug); Maple Rd Softball Field, Washington Co., WI (Aug); Blise Property Pond, Washington Co., WI (Aug); St. Johns NW Military Academy Wetlands-PEC, Waukesha Co., WI (Aug); Wildwood Property Wetlands-Navigability, Walworth Co., WI (Aug); Goldendale Rd Property, Washington Co., WI (Aug); 6951 S Lovers Lane, Milwaukee Co., WI (Aug); Klumb Property Wetlands-Corridor, Waukesha Co., WI (Aug); Ulao Creek Residential, Ozaukee Co., WI (Sep); Grand Hills Castle Expansion GP, Waukesha Co., WI (Sep); 31110 82<sup>nd</sup> St Property, Kenosha Co., WI (Sept); Miller Property Wetlands-SEC, Waukesha Co., WI (Sep); Townline Rd Water Main Wetlands-GP, Waukesha Co., WI (Sep); Sanctuary at Good Hope East PEC, Waukesha Co., WI (Oct); Kutzler Express Property, Kenosha Co., WI (Oct); 47<sup>th</sup> Ave Property, Kenosha Co., WI (Oct); Steinbrink Property, Kenosha Co., WI (Oct); Caledonia Developments, Racine Co., WI (Oct); DeGrave Farm, Racine Co., WI (Oct); Nettesheim Farm Pewaukee, Waukesha Co., WI (Oct); Fisher-Barton Property, Waukesha Co., WI (Oct); BRP shipyard Sturtevant, Racine Co., WI (Oct); CTH C Site Sheboygan Falls, Sheboygan Co., WI (Oct); Willabay Meadows Residential, Walworth Co., WI (Oct); Thode Dr Property, Waukesha Co., WI (Oct); Middle Rd Property Wetlands-AWER, Racine Co., WI (Oct); Three Pillars Dousman Ph1A, Waukesha Co., WI (Oct); Primrose School Site Brookfield, Waukesha Co., WI (Oct); Grand Geneva Housing Site, Walworth Co., WI (Nov); 2651 Fuller Rd Site, Rock Co., WI (Nov); Willis Ray Rd Property, Walworth Co., WI (Nov); Harding Dr Menomonee Falls Site, Waukesha Co., WI (Nov).

#### 2021 Wetland Delineations, Exemption Submittals, and Permitting (95 sites)

CTH CW Property Exemption, Jefferson Co., WI (Jan); BP Parcel Determination, Kenosha Co., WI (Mar); Narula Property, Kenosha Co., WI (Apr); So Wi Veterans Mem Cemetery, Racine Co., WI (Apr); N. 70<sup>th</sup> St. Site, Milwaukee Co., WI (Apr); 6<sup>th</sup> & Grange Site, Milwaukee Co., WI (Apr); North Lake Dr Site, Racine Co.,



WI (Apr); E. Lakeshore Dr Property, Kenosha Co., WI (Apr); Deaton Parcel Exemption, Kenosha Co., WI (Apr); Alliant Energy Solar Site, Sheboygan Co., WI (Apr); Breg-3 Site Exemptions, Milwaukee Co., WI (Feb); Bristol Highlands, Kenosha Co., WI (Apr); Sandalwood Lot 20, Oconto Co., WI (Apr); Martin Rd Parcels, Waukesha Co., WI (Apr); Fair Meadow Subd Exemption, Walworth Co., WI (Apr); Will Rose Haven GP, Waukesha Co., WI (Apr); Bristol Property Wetlands & Exemption, Kenosha Co., WI (Apr); 11900 N Port Washington Rd, Ozaukee Co., WI (Apr); Gibbs Parcel, Kenosha Co., WI (May); Schaefer Farm, Racine Co., WI (May); Lisbon 12-Ac Parcel, Waukesha Co., WI (May); Coach Hills Exemptions, Racine Co., WI (May); Ventimiglia Property, Oconto Co., WI (May); Case HS Property, Racine Co., WI (May); Warntjes North-South Parcels, Kenosha Co., WI (May/Jul); CSM 3325 Dover, Racine Co., WI (May); STH 175 Parcel, Washington Co., WI (May); Holy Hill Rd Property, Washington Co., WI (May); Lyons Parcel Determination, Walworth Co., WI (May); CSM 3591 Mequon, Ozaukee Co., WI (May); Parcel 293-0965 Pleasant Prairie, Kenosha County, WI (May); Denoon Country Estates Muskego, Waukesha Co., WI (May); Blaze Landscaping Lisbon Parcel Wetlands-Exemption, Waukesha Co., WI (Jun); Hughes Parcel wetlands-Woodlands-PEC, Racine Co., WI (Jun); Logan Parcel, Washington Co., WI (May); CTH LL Property, Ozaukee Co., WI (Jun); Steenburg Farm Oakridge, Fond du Lac Co., WI (Jun); Steenburg Farm Dallman, Fond du Lac Co., WI (Jun); UW Parkside Utility Renovations, Kenosha County, WI (May); Salem Lakes Parcel 70412, Kenosha County, WI (Jun); Russet Ct Muskego Site, Waukesha Co., WI (Jun); Kazmierczak Property, Washington Co., WI (Jun); Parcel 152-0100 Pleasant Prairie, Kenosha Co., WI (Jun); 59-Acre Parcel Lisbon Property, Waukesha Co., WI (Jun); 98<sup>th</sup> St Parcel Randall, Kenosha Co., WI (Jun); Ryan Rd 80-Ac Site, Milwaukee Co., WI (Jul); Hickory Hill West Wetland-PEC Lisbon, Waukesha Co. WI (Jun); Cranberry Creek Landvill, Wood Co., WI (Jul); Christina Estates Outlot 1 Exemption, Racine Co., WI (Jul); LG House of Music Property, Walworth Co., WI (Jul); STH 158-194 Property, Kenosha Co., WI (Aug); 3-Mile Rd Property, Racine Co., WI (Jul); Price Parcel Ottawa, Waukesha Co., WI (Jul); Lot 1 Lilac Rd Rubicon, Dodge Co., WI (Aug); 633 Progress Dr Determination, Ozaukee Co., WI (Jul); I41 & STH60 Property Slinger, Washington Co., WI (Aug); Summit Parcel 0708985 Determination, Waukesha Co., WI (Aug); Timberline Trail Landfill Wetlands and Exemption, Rusk Co., WI (Aug); Seasons at Mt Pleasant Sewer, Racine Co., WI (Aug); Kenny Dr Lots 1-2, Washington Co., WI (Aug); Bliffert Lumber Germantown, Washington Co., WI (Aug); Gibson Parcels Eagle Site, Waukesha Co., WI (Aug); Clover Run Stables, Racine Co., WI (Sep); Pink Property Salem Lakes GP, Kenosha Co., WI (Sep); Albano Property Carol Beach, Kenosha Co., WI (Sep); Mosconi Parcel Somers, Kenosha Co., WI (Sep); Petrie Rd Property Geneva, Walworth Co., WI (Sep); NML Property Oak Creek, Milwaukee Co., WI (Sep); Carol Beach Estates, Kenosha Co., WI (Sep); Mt. Pleasant Business Ctr Site, Racine Co., WI (Sep); Pleasant Prairie Power Plant, Kenosha Co., WI (Sep); STH 31 Property, Racine Co., WI (Sep); 112<sup>th</sup> St Expansion Parcel, Milwaukee Co., WI (Oct); Glacier Ridge Landfill EC Site, Dodge Co., WI (Sep); City-View Subdivision Horicon, Dodge Co., WI (Sep); Rock Rd Co Beloit, Rock Co., WI (Oct); Glass Parcels Richfield, Washington Co., WI (Oct); Alliant Clinton Substation, Rock Co., WI (Oct); Triggs Property Delafield, Waukesha Co., WI (Oct); Singh Parcel Franklin, Milwaukee Co., WI (Oct); Hilmer Property Muskego, Waukesha Co., WI (Oct); Baseler Property Muskego, Waukesha Co., WI (Oct); ALDI Property Oak Creek, Milwaukee Co., WI (Oct); Plank Rd Property Burlington, Racine Co., WI (Oct); Jackson Marsh Restoration Site, Washington Co., WI (Oct); Pilgrim Rd Parcel Brookfield, Waukesha Co., WI (Oct); Henneberry Parcel Muskego, Waukesha Co., WI (Oct); Ewig Parcel Franklin, Milwaukee Co., WI (Oct); STH 120 Site L Geneva, Walworth Co., WI (Oct); KMHS Wales, Waukesha Co., WI (Oct); 184<sup>th</sup> Ave Bristol Property, Kenosha Co., WI (Oct); 144<sup>th</sup> Ave Bristol Property, Kenosha Co., Pabst Rd Oconomowoc Site, Waukesha County, WI (Oct); N Lake Shore Dr Mequon, Ozaukee Co., WI (Nov); 28414 Wilmot Rd Salem Lakes, Kenosha Co., WI (Nov); 819 E Drexel Site, Milwaukee Co., WI (Nov).

## 2020 Wetland Delineations, Exemption Submittals, and Permitting (90 sites)

Courtney Street Storage Buildings, Racine Co., WI (Feb); 86<sup>th</sup> Ave & STH 165 Parcel, Kenosha Co., WI (Feb-Apr); Harris Gravel Pit, Dane Co., WI (Mar-Apr); Alliant Birnamwood Substation, Shawano Co., WI (Apr); Rolling Meadows Drive Parcel, Fond du Lac Co., WI (Apr); Lieds Nursery Site, Waukesha Co., WI (Apr); Plas-Tech Engineering Site, Walworth Co., WI (Apr); Fink Parcel, Racine Co., WI (Apr); Lot 1 Proposed CSM 3258, Racine Co., WI (Apr); Harris Gravel Pit, Dane Co., WI (May); Schumacher Rd Reconstruction, Dane Co., WI (Apr); Whitetail Ridge Ph2, Kenosha Co., WI (Apr), Kelly Pit Addition, Dane Co., WI (Apr); Myrtle Way Road Improvements, Rock Co., WI (Apr); Pewaukee Industrial Park South, Waukesha Co., WI (May); Mueller Property, Fond du Lac Co., WI (Apr); 3901 Kipp Street Site, Dane Co., WI (Apr); Witte Parcels, Dane Co., WI (Apr); Sandalwood Lots 7-8, Oconto Co., WI (Apr); Yellowstone Outdoor Resort, Lafayette Co., WI (Apr); S&L Underground Expansion, Columbia Co., WI (May); 200 Baraboo Street, Sauk Co., WI (May); Jefferson Pit, Jefferson Co., WI (May); Rock Point Village, Waukesha Co., WI (May); Blanchardville Coop Oil & NGSD Parcels, Green Co., WI (May); Logtown Development, Sauk Co., WI (Jun); Maple Ave Property, Waukesha Co., WI (May); Wanasek Property, Racine Co., WI (May); Meier Farms, Dane Co., WI (Jun); 76<sup>th</sup> & Ryan Site, Sauk Co., WI (May); Milton Townline Road Site, Rock County, WI (May); Somers Multi-family Site, Kenosha



Co., WI (May); Cazenovia WWTP Expansion, Waukesha Co., WI (Jun); Waukegan Property, Lake Co., IL (Jun); Ozaukee Christian School, Washington Co., WI (Jun); Kohler Distribution Center, Sheboygan Co., WI (Jun); Veterans Memorial Park West Site, Kenosha County, WI (Jun); Veterans Memorial Park East Site, Kenosha County, WI (Oct); Bristol Commons Site, Kenosha Co., WI (Jun); Barels Property, Racine Co., WI (Jun); Rogich Property, Milwaukee Co., WI (Jun); CTH MM Intersection Reconstruction, Dane Co., WI (Jul); Rose Property, Racine Co., WI (Jun); Baldev Court Property, Ozaukee Co., WI (Jul); Paul-Meghan Dominie Property, Dane Co., WI (Jul); Union Court Site, Kenosha Co., WI (Jul); Webcrafters Parcels, Dane Co., WI (Jul); Site Security Upgrades Site, Waukesha Co., WI (Jul); Scuppernong Creek Site, Waukesha Co., WI (Jul); W9030 Oak Ridge Road Property, Jackson Co., WI (Jul); Cherokee Golf Course, Dane Co., WI (Aug); W3948 South Shore Drive, Walworth Co., WI (Aug); Caledonia Multifamily Site, Racine Co., WI (Aug), Mittelstaedt Property, Sauk Co., WI (Aug); 1525 Bryce Drive Parcel, Winnebago Co., WI (Sep); Platten Property, Outagamie Co., WI (Sep); St. Mary's Springs Site, Fond du Lac Co., WI (Sep); Fairway Village Site, Ozaukee Co., WI (Sep); Quarry Park Site, Waukesha Co., WI (Sep); CTH F-Concord Site, Jefferson Co., WI (Sep); HJ Williams Farm, Adams Co., WI (Oct); STH 16-Lisbon Rd Parcel, Waukesha Co., WI (Sep); Golden Lake Road Property, Waukesha Co., WI (Sep); 4522 CTH P Parcel, Washington Co., WI (Sep); Darby Farms, Kenosha Co., WI (Sep); 227 Sussex Street, Waukesha Co., WI (Sep); Lexus of Brookfield Site, Milwaukee Co., WI (Sep); Wesner Greenfield Ave Parcels, Waukesha Co., WI (Sep); Oriole Lane Parcels, Ozaukee Co., WI (Oct); Wayside Parkview Estates, Brown Co., WI (Sep); Wind Point Parcel, Racine Co., WI (Oct); Geneva National Lot 18-23, Walworth Co., WI (Oct); Badger Farm, Racine Co., WI (Oct); Dorset Corners Substation, Monroe Co., WI (Sep); Covered Bridge Rd Site, Ozaukee Co., WI (Oct); Trek Distribution Center, Jefferson Co., WI (Oct); Craftsman Drive Parcel, Waukesha Co., WI (Oct); Village Green Subdivision, Ozaukee Co., WI (Oct); Ansay Farm, Ozaukee Co., WI (Oct); Zenner Farm Property, Racine Co., WI (Oct); West Snell Rd Site, Winnebago Co., WI (Oct); Kenosha County Bridges, Kenosha Co., WI (Oct); Confidential Site Janesville, Rock Co., WI (Oct); Janesville Airport Site, Rock Co., WI (Oct); 10920 West Liberty Drive, Milwaukee Co., WI (Oct); V of River Hills 53-Acre Site, Milwaukee Co., WI (Oct); Hwy 14 & Lacy Rd Site, Dane Co., WI (Oct); Wilderness Way Parcel, Waukesha County, WI (Oct); Hummingbird Lane Parcel, Sheboygan Co., WI (Oct); Plainview Rd Site, Waukesha Co., WI (Nov); Delimat Property, Kenosha Co., WI (Nov); 11900 N Port Washington Rd Parcel, Ozaukee Co., WI (Nov); Canopy Hills Artificial Wetland, Racine Co., WI (Dec); Strauss Brands Facility, Milwaukee County, WI (Dec).

#### **2019 Wetland Delineations, Exemption Submittals, and Permitting (39 sites)**

North Hills Subdivision, Waukesha Co., WI (Jan); Prairie Walk Subdivision, Waukesha Co., WI (Apr); Loomis Parcel Determination, WI (Mar-Apr); Lamminem Parcel, Kenosha Co., WI (Apr); Lot 103 Burlington, Racine Co., WI (Apr); 7220 Ryan Rd Parcel, Milwaukee Co., WI (Apr); 1-Acre Franklin Parcel, Milwaukee Co., WI (June); 256<sup>th</sup> Ave Site, Kenosha Co., WI (May); 915 Main St Mukwonago, Waukesha Co., WI (May); Muskego Lakes CC, Muskego, Waukesha Co., WI (June), Bonniwell Road Parcel, Ozaukee Co., WI (July); 333 Portland Rd Site, City of Waterloo, Jefferson Co., WI (May); Thompson Lane Parcel, Village of Chenequa, Waukesha Co., WI (May); Schmitz Redi-Mix Site, Village of Mt. Pleasant, Racine Co., WI (June); New Berlin Redi-Mix Site, City of New Berlin, Waukesha Co., WI (May); Elm Grove Road Basin, City of New Berlin, Waukesha Co., WI (May); Lathrop-Meacham Parcels Mitigation Site, Village of Mt. Pleasant, Racine Co., WI (May-July); Lot 18-31 Geneva National Site, Town of Geneva, Walworth Co., WI (July); Bohner's Lake Parcel, Town of Burlington, Racine Co., WI (Sept); 6970 South 6<sup>th</sup> St., City of Oak Creek, Milwaukee Co., WI (Aug); Weatherstone Meadows site, City of New Berlin, Waukesha Co., WI (Aug); Parkview Apartments site, Village of Somers, Kenosha Co., WI (Aug); Volkswagen Expansion site, Village of Pleasant Prairie, Kenosha Co., WI (Aug); Pewaukee-Brookfield Trail, Waukesha Co., WI (Aug-Sept); Parcel 1268-993, City of New Berlin, Waukesha Co., WI (Aug); Germantown Industrial Business Park, Washington Co., WI (Oct); Haasch- Finger site, City of Brookfield, Waukesha Co., WI (Oct); Kennedy Property, Village of Waunakee, Dane Co., WI (Oct); Jefferson County Interurban Trail, Towns of Watertown and Ixonia, Jefferson Co., WI (Oct); Mukwonago Residential Parcel, Village of Mukwonago, Waukesha Co., WI (Oct); Pine Ridge Estates, City of Oconomowoc, Waukesha Co., WI (Oct); Silver Lake Parcels, Village of Salem Lakes, Kenosha Co., WI (Oct); New Berlin Trail Phase II, City of Waukesha, Waukesha Co., WI (Oct); 1910 W Puetz Road site, City of Oak Creek, Milwaukee County, WI (Oct); Project Redline, Village of Menomonee Falls, WI (Oct); CSM 3232 Oulot 1, Village of Mt. Pleasant, Racine Co., WI (Oct); Plant Community Mapping and Assessment, City of Oak Creek, Milwaukee Co., WI (Nov); Faber Property, Village of Williams Bay, Walworth Co., WI (Nov); Campus Drive Property, Village of Hartland, Waukesha Co., WI (Dec).

#### **Example 2018 Wetland Delineations in WI and IL (50 sites)**

Homestead Acres, Racine Co., WI (Apr); Greenmeadows, Racine Co., WI (Apr), Wind Point School, Racine Co., WI (Apr); Vintage Parc East, Kenosha Co., WI (Apr); Nelson-Heckel, Kenosha Co., WI (Apr); Caledonia Storage, Racine Co., WI (Apr); New Berlin Storage, Waukesha Co., WI (Mar); Manke Gravel Pit, Columbia



Co., WI (May); Drissel-Wallace, Kenosha Co., WI (May); LaBelle Golf Course, Waukesha Co., WI (May); Waterloo Aluminum, Jefferson Co., WI (May); Salem Business Park, Kenosha Co., WI (May); Audubon Arboretum, Racine Co., WI (May); Briarwood, Racine Co., WI (May); Basting-Brown Parcels, Waukesha Co., WI (May); 84-Acre Site, Racine Co., WI (May); Jolenta Lane, Waukesha Co., WI (Apr); Rock Road Storage, Walworth Co., WI (May); Wildwood Creek, Winnebago Co., WI (Jun); Green Bay Site, Brown Co., WI (Jun); Main Street Market, Kenosha Co., WI (Jul); Armstrong Eddy Park, Rock Co., WI (May); Hickory St Site, Ozaukee Co., WI (Jun); Parcel DW 800004, Walworth Co. (Jun); Lot 8 Parcel WCA-0003, Walworth Co., WI (Jun); RRR Grundy, Kane Co., IL (Jul); Coleman Norris Parcel, Waukesha Co., WI (Jul); Deaton Parcel, Kenosha Co., WI (Aug); Hintz Parcel, Washington Co., WI (Aug); Loomis-Ryan Rds Site, Milwaukee Co., WI (Aug); Grass Parcels, Waukesha Co., WI (Sep); Mallard Ridge Landfill Pipeline, Walworth Co., WI (Sep); Glacier Ridge Landfill Pipeline, Dodge Co., WI (Sep); Ravenwoods, Waukesha Co., WI (Aug); Canopy Hills, Racine Co., WI (Sep); Duck Pond, Kenosha Co., WI (Sep); Splinter Parcels, Racine Co., WI (Oct); Berget Parcel, Walworth Co., WI (Sep); Saylesville Rd Parcel, Waukesha Co., WI (Oct); Racine Ave-Lawnsdale Rd Parcel, Waukesha Co., WI (Oct); Braun Rd-90<sup>th</sup> St Parcel, Racine Co., WI (Oct); Grafton Parcels, Ozaukee Co., WI (Dec); Crawford Parcel, Racine Co., WI (Nov); Kotas Parcels, Racine Co., WI (Nov); Altamount Acres South, Racine Co., WI (Dec); Christina Estates, Racine Co., WI (Dec); Christina Estates NE, Racine Co., WI (Dec); Lathrop Parcel, Racine Co., WI (Dec); Hillside Ridge, Waukesha Co., WI (Dec); Stolz Property, Waukesha Co., WI (Dec).

#### Example 2017 Wetland Delineations in WI, MI, IN, and IL (31 Sites)

Back 40 Mine, Menominee Co., MI (Jan); Oakdale Rd Site, Waukesha Co., WI (Sep); Birds Eye Foods, Walworth Co., WI (Sep); Boss Property, Leelanau Co., MI (Jul); Brighton Estates, Waukesha Co., WI (Sep); Saltzman North, Waukesha Co., WI (Sep); Susnar Parcel, Waukesha Co., WI (Sep); Wrenwood Site, Washington Co., WI; Chorneyko Site, Walworth Co., WI (Apr); CN Railroad Bridges-6 Sites, Fond du Lac & Winnebago Co's, WI; CN Railroad Freepart Culvert, Kane Co., IL (May); Herrling Site, Dane Co., WI (Sep); MMSD Sewerage Project, Milwaukee Co., WI (May); Spring St Site, Racine Co., WI (Oct); Goshen Midway Cell Tower, Elkhart Co., IN (Apr); Two Creeks Utility Site, Manitowoc Co., WI (Nov); Suncast Site, Kane Co., IL (Dec); Lot 51 Lakeview Corp Park, Kenosha Co., WI (Oct); Lakefront Gun Range, Racine Co., WI (Oct); WI Club Golf Course, Milwaukee Co., WI (Apr); WisDOT Improvements, STH 32 Racine Co (Aug), STH 67 Walworth Co. (Sep), STH 20, Racine Co. (Oct), 27th St, Milwaukee Co. (Sep); Conference Point Boat Launch, Walworth Co., WI (Oct); Lake View RR Corridor, Portage Co., WI (Sep).

#### Example 2016 Wetland Delineations in WI, OH, MI and IL (Mostly Large Projects)

AEP Wavery-Adams-Seaman 138 kV Trans. Line Rebuild, Adams & Pike Co's, OH (Dec); Kansas West-Faraday Trans. Line Rebuild-Macon, Moultrie, & Coles Co's, IL (Jan); Riveredge Nature Center Preliminary, Ozaukee Co., WI (Feb); Lost Creek Mitigation Site, Portage Co., WI (Jun); I-41 Burleigh to Good Hope Corridor WisDOT, Milwaukee Co., WI (Jul); STH 60 Corridor, Ozaukee & Washington Co's, WI (Aug-Oct); Erin Hills Golf Course, Washington Co., WI (Sep); Back 40 Mine, Menominee Co., MI; Lake Zurich SW Cell Tower, Lake Co., IL (Oct); Acme Steel Coke Site, Cook Co., IL (Dec).

#### Example 2015 Wetland Delineations in WI, IL, and MO (Mostly Large Projects)

Bolser Street MO33211-M Cell Tower Site, Grundy Co., MO (Sep); Section 9 Site, Dane Co., WI (Apr); Franzel Rd Site, Bayfield Co., WI (Apr); Big Eau Pleine Mitigation Site, Marathon Co., WI (Aug); Taylor Road Siding Track, Jackson Co., WI (Nov); UPS-CACH Site, Cook Co., IL (Jun); Eggers Woods Forest Preserve, Cook Co., IL (Mar).

#### Example 2014 Wetland Delineations in WI, IL, and MI (Mostly Large Projects)

Emerald Park Western Expansion, Waukesha Co., WI (Oct); Arcadia Mining Site-Trempealeau Co., WI (Apr); Kalamazoo River Parcel, Kalamazoo and Calhoun Co's, MI (Jul); G2 Mitigation Site - Winnebago Co., WI (May); Line 6A MP 378.94, McHenry Co., IL (Sep); Geneva National Site, Walworth Co., WI (Nov); Nortrax Site -Lincoln Co., WI (Oct); Toberman Parcel- Crawford Co., WI (Oct).

#### Example 2013 Wetland Delineations in WI, IL, OH, and MI (Mostly Large Projects)

West Central Lateral - Eau Claire, Clark, Jackson & Monroe Co's, WI (Apr-May); Walker Cranberry 80- acre Parcel - Jackson Co., WI (Sept - Oct); Berne to Natrium Pipeline, Monroe Co., OH (Oct); CNX Noble Pipeline - Noble Co., OH (Oct); Deer Grove Forest Preserve, Cook Co., IL (Nov).

#### Example 2012 Wetland Delineations in WI, IL, IN, and TX (Mostly Large Projects)

West Central Lateral (190 miles), Eau Claire, Clark, Jackson & Monroe Co's, WI (Sep-Nov); Morrison Creek



*Cranberry Parcel, Jackson Co., WI (Aug); London Mitigation Site, Jefferson Co., WI (July); Southern Access Pipeline, Sawyer & Washburn Co's, WI (Jun); I-80 Interchange, LaPorte Co., IN (Mar); Eagle-Ford Shale Plays, LaSalle & McMullen Co's, TX (Jan-Feb).*

I-94 Corridor Wetland and Primary Environmental Corridor Mapping and Endangered Species Study, Milwaukee, Racine, and Kenosha Counties, WI (Project Manager and Lead Scientist)

Primary Environmental Corridor Delineation Parkview Site, Village of Somers, WI (Lead Scientist)

Elm Road Generating Station, Oak Creek & Caledonia, WI (Project Manager & Lead Scientist)

Tri-State Tollway, Deerfield Plaza Wetland and Endangered Species Investigation, Lake and Cook Counties, IL (Lead Scientist)

Guardian II Laterals, Fox Valley, Hartford and West Bend, WI (Project Manager and Lead Scientist)

ATC Paris to St. Martins (KK3025) 138KV Line Rebuild, Kenosha, Racine and Milwaukee Counties, WI (Project Manager and Lead Scientist)



Surya Powered LLC  
McHenry Solar Farm – McHenry Co.  
Project #: 20251635  
November 12, 2025

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## Appendix G | Off-Site Analysis

**TABLE A1**

**Wetland Hydrology from Aerial Imagery - Recording Form\***

Project Name: McHenry County Solar Farm  
Investigator: Eric C. Parker, SPWS

Date: 9/21/2025  
Legal Description (T, R, S): \_\_\_\_\_

County: McHenry Co, IL  
T44N R8E S8, S9

**Summary Table**

Date Image Taken*	Image Source	Climate Condition (wet, dry, normal)	Image Interpretation(s)					
			See <b>Signature Areas</b> Figure for outlines of Areas 1-6					
			Area: 1	Area: 2	Area: 3	Area 4	Area 5	Area 6
2004-08-22	NAIP	Normal	SS	SS	NV NSS	NV NSS	CS-	CS
2005-07-10	NAIP	Dry	SS	SS	NV NSS	NV NSS	SS	NV NSS
2006-07-17	NAIP	Normal	NV NSS	WS	CS	NV NSS	AP	CS
2007-07-21	NAIP	Wet	WS	WS	CS	CS-	NV NSS	CS-
2009-08-06	NAIP	Normal	NV NSS	NV NSS	CS-	NV NSS	SS-	NV NSS
2009-05-01	County	Wet	NV NSS	NC SS	SS	NV NSS	SS	SS
2010-07-01	NAIP	Wet	SS-	NC SS	NV NSS	NV NSS	CS	NV NSS
2011-08-26	NAIP	Normal	NV NSS	NC	NV NSS	CS	CS	CS
2012-06-19	NAIP	Dry	NV NSS	SS	SS-	NV NSS	CS-	NV NSS
2014-06-13	NAIP	Dry	NV NSS	SS	NV NSS	SS	SS	SS
2015-09-16	NAIP	Normal	NV NSS	WS	CS	CS SS	CS WS	NV NSS
2017-04-15	County	Wet	NV NSS	SS-	NV NSS	SS	SS	SS
2017-09-01	NAIP	Wet	NV NSS	NV NSS	CS	CS	CS DO	CS
2019-09-14	NAIP	Normal	NV NSS	WS AP	AP	NV NSS	NV NSS	WS CS
2021-04-15	County	Normal	NV NSS	NV NSS	NV NSS	NV NSS	SS-	NV NSS
2021-09-05	NAIP	Normal	NV NSS	NV NSS	NV NSS	CS-	CS-	NV NSS
2022-04-15	County	Normal	NV NSS	SS-	NV NSS	NV NSS	SS	NV NSS
2023-08-18	NAIP	Normal	NV NSS	NV NSS	NV NSS	CS--	CS-	NV NSS
<b>Normal Climate Condition</b>			<b>Area: 1</b>	<b>Area: 2</b>	<b>Area: 3</b>	<b>Area 4</b>	<b>Area 5</b>	<b>Area 6</b>
<b>Number</b>			10	10	10	10	10	10
<b>Number with wet signatures</b>			1	6	4	4	9	4
<b>Percent with wet signatures</b>			10%	60%	40%	40%	90%	40%

Key		
WS - Wetland Signature	SS - Soil Wetness Signature	CS - Crop Stress
NC - Not Cropped	AP - Altered Pattern	NV - Normal Vegetative Cover
DO - Drowned Out	SW - Standing Water	NSS - No Soil Wetness Signature
Other labels or comments:		

\* Images that were taken after the 20th of their respective month were evaluated under the following month's table to account for otherwise missing precipitation data from the start of the month to the date the image was recorded.

- Use above key to label image interpretations. It is imperative that the reviewer read and understand the guidance associated with the use of these labels. If alternate labels are used, indicate in box above.
- If less than five (5) images taken during normal climate conditions are available, use an equal number of images taken during wet and dry climate conditions and use as many images as you have available. Describe the results using this methodology in your report.

\* Source: [http://www.bwsr.state.mn.us/wetlands/delineation/Guidance\\_for\\_Offsite\\_Hydrology\\_and\\_Wetland\\_Determinations.pdf](http://www.bwsr.state.mn.us/wetlands/delineation/Guidance_for_Offsite_Hydrology_and_Wetland_Determinations.pdf)



**Wetland Determination from Aerial Imagery - Recording Form\***

Project Name: McHenry County Solar Farm  
Investigator: Eric C. Parker, SPWS

Date: 9/21/2025 County: McHenry, IL  
Legal Description (T, R, S): T44N R8E S8, S9

Use the decision matrix below to create Table A2

Hydric Soils Present? <sup>1</sup>	Identified on NWI or WWI? <sup>2</sup>	Percent with Wet Signatures from TABLE A1	Field Verification Required? <sup>3</sup>	Wetland?
Yes	Yes	>50%	No	Yes
Yes	Yes	30-50%	No	Yes
Yes	Yes	<30%	Yes	Yes, if other hydrology indicators are present
Yes	No	>50%	No	Yes
Yes	No	30-50%	Yes	Yes, if other hydrology indicators are present
Yes	No	<30%	No	No
No	Yes	>50%	No	Yes
No	Yes	30-50%	No	Yes
No	Yes	<30%	No	No
No	No	>50%	Yes	Yes, if other hydrology indicators are present
No	No	30-50%	Yes	Yes, if other hydrology indicators are present
No	No	<30%	No	No

<sup>1</sup>The presence of hydric soils can be determined from the "Hydric Rating by Map Unit Feature" under "Land Classifications" from the Web Soil Survey. "Not Hydric" is the only category considered to not have hydric soils. Field sampling for the presence/absence of hydric soil indicators can be used in lieu of the hydric rating if appropriately documented by providing completed field data sheets.

<sup>2</sup>At minimum, the most updated NWI data available for the area must be reviewed for this step. Any and all other local or regional wetland maps that are publically available should be reviewed.

<sup>3</sup>Area should be reviewed in the field for the presence/absence of wetland hydrology indicators per the applicable 87 Manual Regional Supplement, including the D2

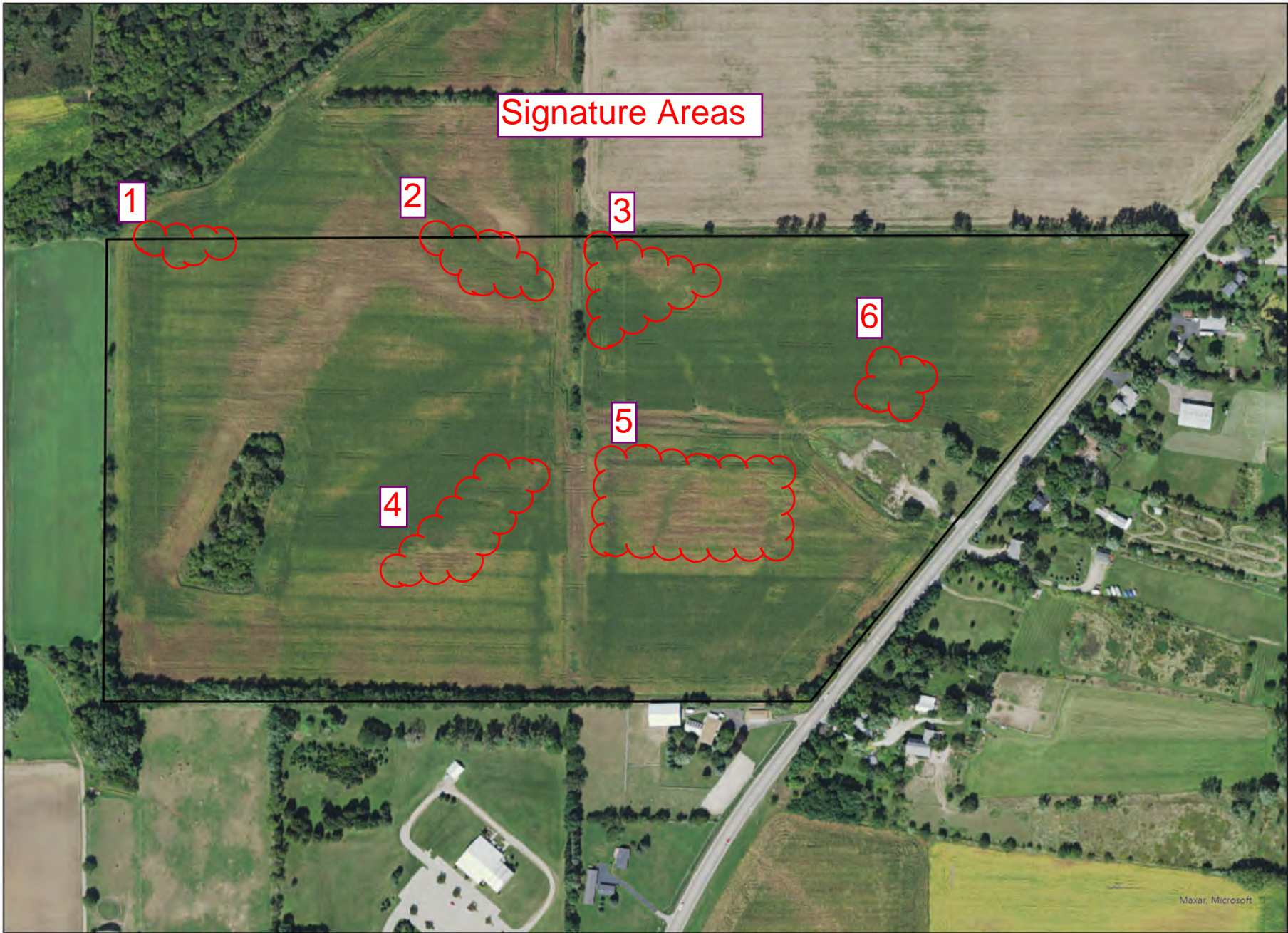
**TABLE A2**

Area	Hydric Soils Present? <sup>1</sup>	Identified on NWI or WWI?	Percent with Wet Signatures from TABLE A1	Other Hydrology Indicators Present? <sup>1</sup>	Wetland?
1	Yes	No	10%		No
2	No	No	60%		Field verification req.
3	No	No	40%		Field verification req.
4	No	No	40%		Field verification req.
5	No	No	90%		Field verification req.
6	No	No	40%		Field verification req.

<sup>1</sup> Answer "N/A" if field verification is not required and was not conducted.

\* Source: [http://www.bwsr.state.mn.us/wetlands/delineation/Guidance\\_for\\_Offsite\\_Hydrology\\_and\\_Wetland\\_Determinations.pdf](http://www.bwsr.state.mn.us/wetlands/delineation/Guidance_for_Offsite_Hydrology_and_Wetland_Determinations.pdf)

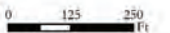




# Signature Areas



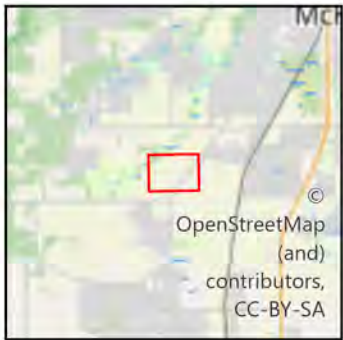
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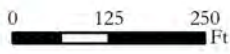
**Heartland**  
ECOLOGICAL GROUP INC  
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McHenry Solar Farm  
Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL  
2015 NAIP  
USDA

Maxar, Microsoft

Figure Created: 9/16/2025



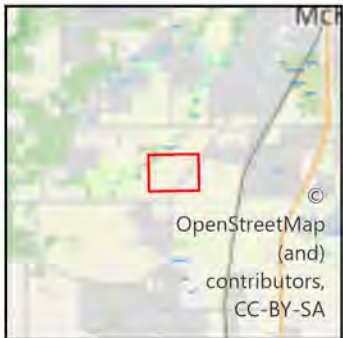
Study Area (75.92 ac)



**Heartland**  
ECOLOGICAL GROUP INC

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Imagery  
McHenry Solar Farm  
Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL  
2004 NAIP  
USDA

Maxar, Microsoft



Study Area (75.92 ac)

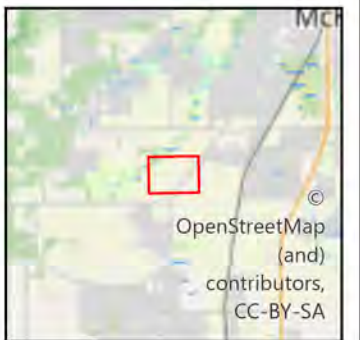
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**Heartland**  
ECOLOGICAL GROUP INC

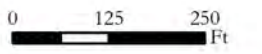
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Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL  
2005 NAIP  
USDA

Maxar, Microsoft

Figure Created: 9/16/2025



Study Area (75.92 ac)

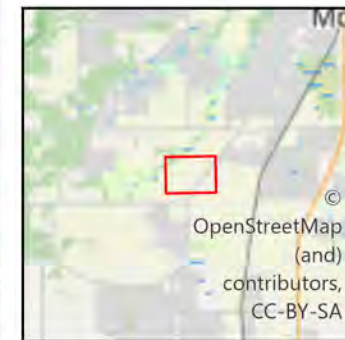


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McHenry Solar Farm  
Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL

2006 NAIP  
USDA

Maxar, Microsoft



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Study Area (75.92 ac)

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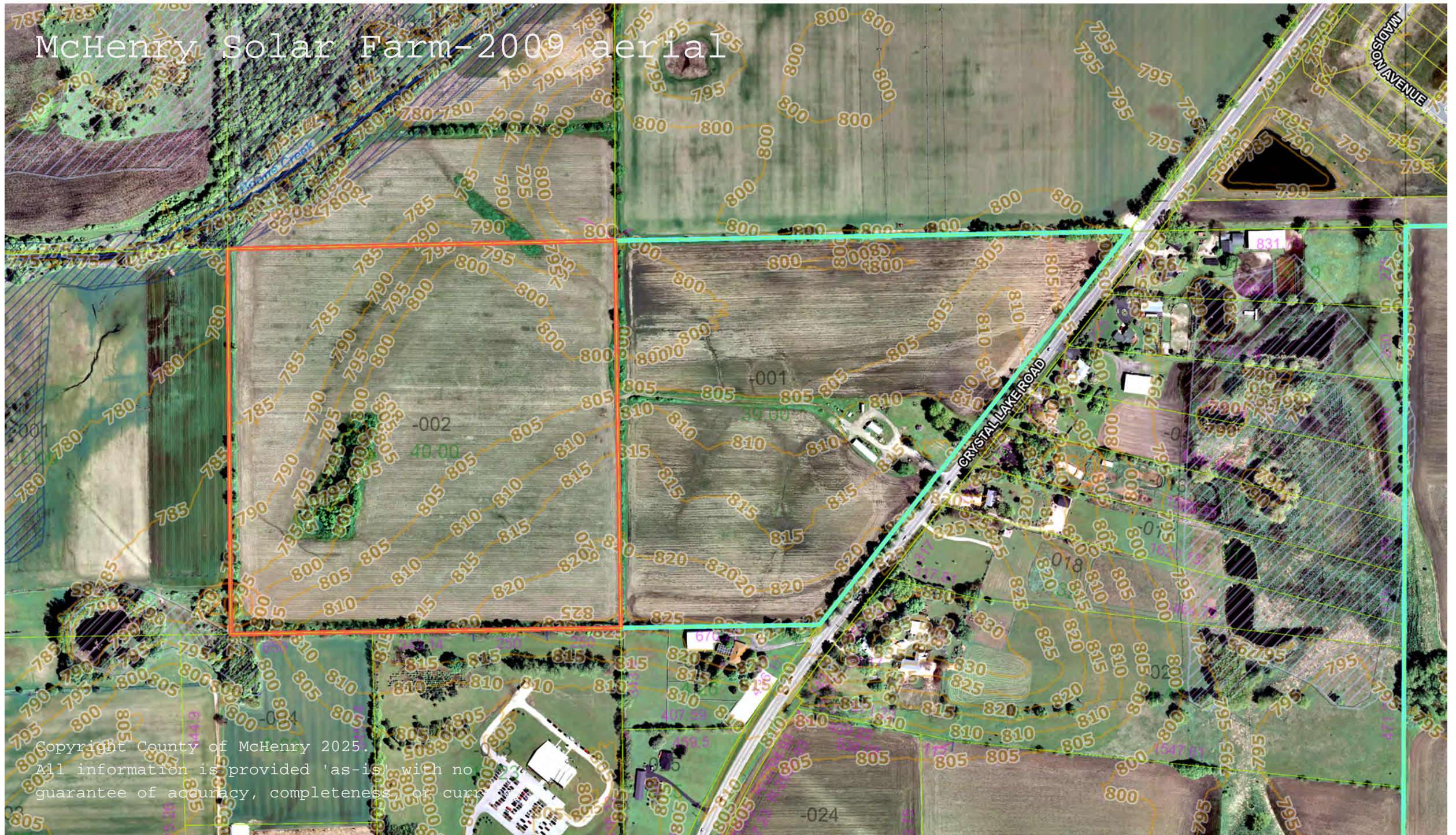
**Heartland**  
ECOLOGICAL GROUP INC

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T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL  
2007 NAIP  
USDA

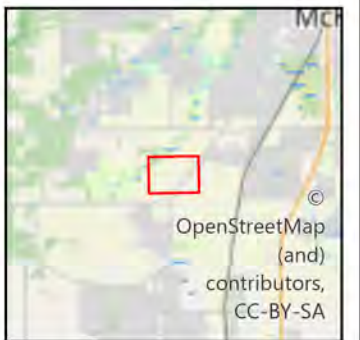
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# McHenry Solar Farm-2009 aerial



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Study Area (75.92 ac)

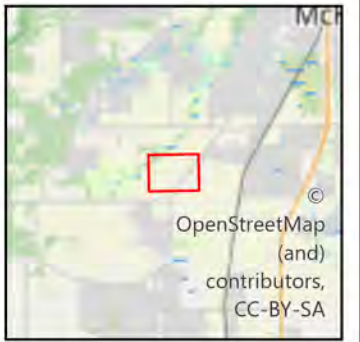


**Heartland**  
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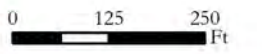
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T Nunda, McHenry Co, IL

2009 NAIP  
USDA

Maxar, Microsoft



Study Area (75.92 ac)

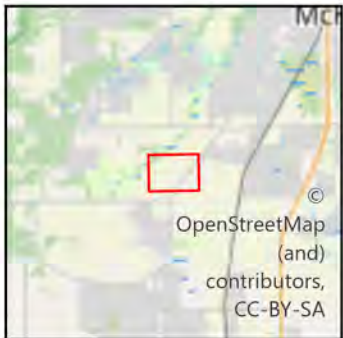


**Heartland**  
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T Nunda, McHenry Co, IL

2010 NAIP  
USDA

Maxar, Microsoft



Study Area (75.92 ac)

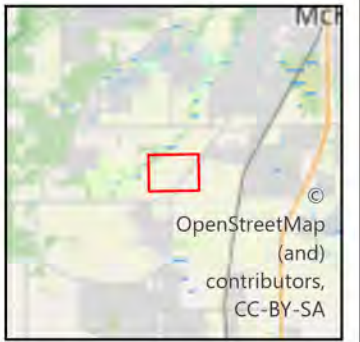
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**Heartland**  
ECOLOGICAL GROUP INC

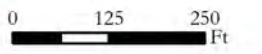
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2011 NAIP  
USDA

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Figure Created: 9/16/2025



Study Area (75.92 ac)

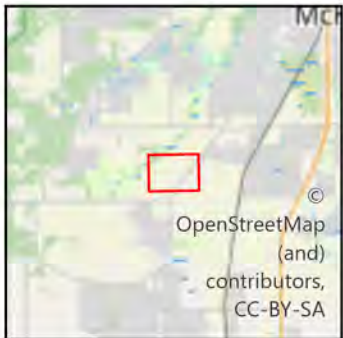


**Heartland**  
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T Nunda, McHenry Co, IL

2012 NAIP  
USDA

Maxar, Microsoft



Study Area (75.92 ac)

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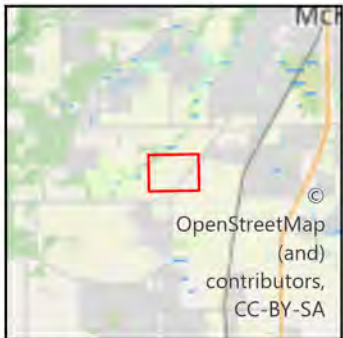
**Heartland**  
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T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL

2014 NAIP  
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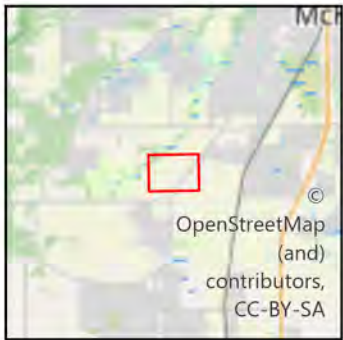
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T Nunda, McHenry Co, IL  
2015 NAIP  
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Study Area (75.92 ac)

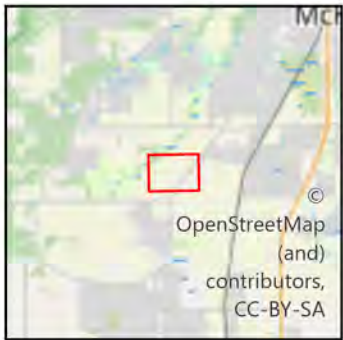
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Project #20251635  
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T Nunda, McHenry Co, IL  
2017 NAIP  
USDA

Maxar, Microsoft

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Study Area (75.92 ac)

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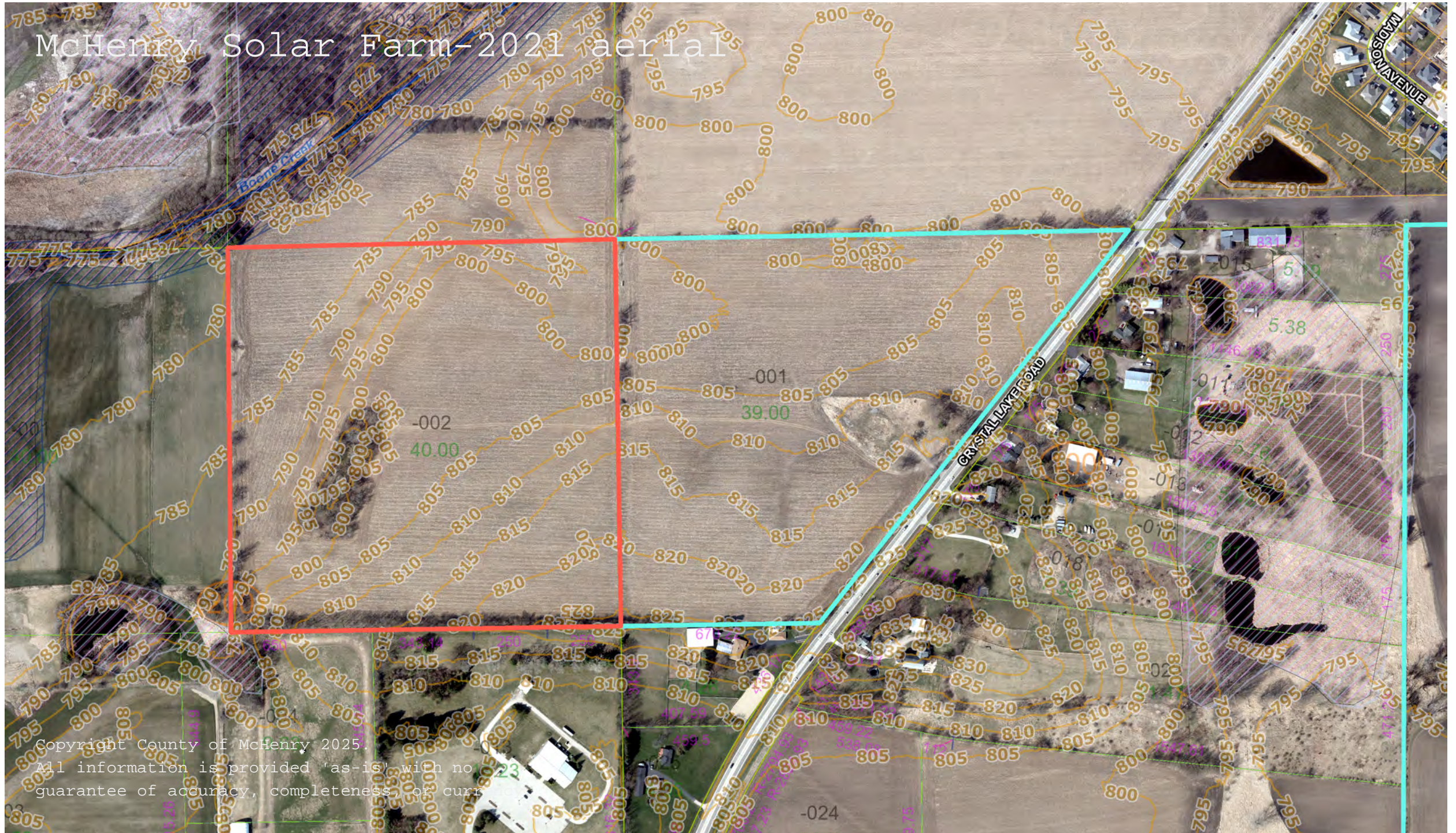
**Heartland**  
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T Nunda, McHenry Co, IL  
2019 NAIP  
USDA

Maxar, Microsoft

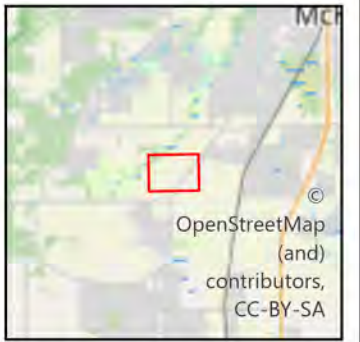
Figure Created: 9/16/2025

# McHenry Solar Farm-2021 aerial



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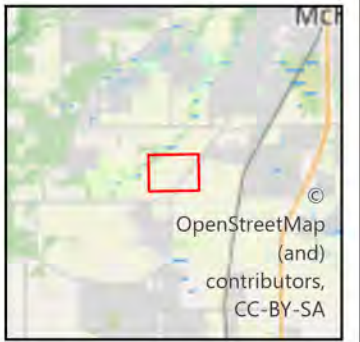
Study Area (75.92 ac)

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T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL  
2021 NAIP  
USDA

Figure Created: 9/16/2025



Study Area (75.92 ac)

0 125 250 Ft

**Heartland**  
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2023-08-18 NAIP Aerial Imagery  
McHenry Solar Farm  
Project #20251635  
T44N, R8E, S08 & S09  
T Nunda, McHenry Co, IL

2023 NAIP  
USDA

Figure Created: 9/16/2025

## April Analysis

Date	Monthly Rainfall in Inches <sup>1</sup>						Weighted Sum	Relative Wetness
	January	Weighted Precip	February	Weighted Precip	March	Weighted Precip		
2017-04-15	2.32	3	1.56	4	4.42	9	16	Wet
2021-04-15	2.28	3	0.91	4	0.96	3	10	Normal
2022-04-15	0.62	1	1.37	4	2.78	9	14	Normal
<b>30% chance less than**</b>	1.05		0.90		1.42			
<b>30 Year Average**</b>	1.67		1.62		2.15			
<b>30% chance more than**</b>	2.02		1.97		2.59			

McHenry Stratton Lock-Dam

30-Year Precipitation Data (1995-2024) from NOAA Website

<http://agacis.rcc-acis.org/>

## May Analysis

Date	Monthly Rainfall in Inches <sup>1</sup>						Weighted Sum	Relative Wetness
	February	Weighted Precip	March	Weighted Precip	April	Weighted Precip		
2009-05-01	2.18	3	3.62	6	4.17	6	15	<b>Wet</b>
<b>30% chance less than**</b>	0.90		1.42		2.67			
<b>30 Year Average**</b>	1.62		2.15		3.60			
<b>30% chance more than**</b>	1.97		2.59		4.22			

McHenry Stratton Lock-Dam

30-Year Precipitation Data (1995-2024) from NOAA Website

<http://agacis.rcc-acis.org/>

## June Analysis

Date	Monthly Rainfall in Inches <sup>1</sup>						Weighted Sum	Relative Wetness
	March	Weighted Precip	April	Weighted Precip	May	Weighted Precip		
2012-06-19	2.12	2	3.24	4	3.11	3	9	Dry
2014-06-13	0.91	1	3.38	4	3.23	3	8	Dry
<b>30% chance less than**</b>	1.42		2.67		3.24			
<b>30 Year Average**</b>	2.15		3.60		4.64			
<b>30% chance more than**</b>	2.59		4.22		5.51			

McHenry Stratton Lock-Dam

30-Year Precipitation Data (1995-2024) from NOAA Website

<http://agacis.rcc-acis.org/>

## July Analysis

Date	Monthly Rainfall in Inches <sup>1</sup>						Weighted Sum	Relative Wetness
	April	Weighted Precip	May	Weighted Precip	June	Weighted Precip		
2005-07-10	1.71	1	3.20	2	1.60	3	6	Dry
2006-07-17	2.74	2	5.02	4	4.00	6	12	Normal
2010-07-01	2.70	2	5.53	6	7.10	9	17	Wet
<b>30% chance less than**</b>	2.67		3.24		3.25			
<b>30 Year Average**</b>	3.60		4.64		4.72			
<b>30% chance more than**</b>	4.22		5.51		5.63			

McHenry Stratton Lock-Dam

30-Year Precipitation Data (1995-2024) from NOAA Website

<http://agacis.rcc-acis.org/>

## August Analysis

Date	Monthly Rainfall in Inches <sup>1</sup>						Weighted Sum	Relative Wetness
	May	Weighted Precip	June	Weighted Precip	July	Weighted Precip		
2007-07-21	1.80	1	5.97	6	5.00	9	16	Wet
2009-08-06	4.94	2	6.52	6	1.57	3	11	Normal
2023-08-18	1.21	1	2.05	2	4.79	9	12	Normal
30% chance less than**	3.24		3.25		2.47			
30 Year Average**	4.64		4.72		3.87			
30% chance more than**	5.51		5.63		4.67			

McHenry Stratton Lock-Dam

30-Year Precipitation Data (1995-2024) from NOAA Website

<http://agacis.rcc-acis.org/>

## September Analysis

Date	Monthly Rainfall in Inches <sup>1</sup>						Weighted Sum	Relative Wetness
	June	Weighted Precip	July	Weighted Precip	August	Weighted Precip		
2004-08-22	4.95	2	1.96	2	3.47	6	10	Normal
2011-08-25	3.46	2	8.41	6	3.72	6	14	Normal
2015-09-16	4.79	2	4.70	6	2.63	6	14	Normal
2017-09-01	6.49	3	8.31	6	2.93	6	15	Wet
2019-09-14	3.64	2	5.77	6	3.17	6	14	Normal
2021-09-05	3.04	1	1.32	2	6.21	9	12	Normal
<b>30% chance less than**</b>	3.25		2.47		2.54			
<b>30 Year Average**</b>	4.72		3.87		3.79			
<b>30% chance more than**</b>	5.63		4.67		4.54			

McHenry Stratton Lock-Dam

30-Year Precipitation Data (1995-2024) from NOAA Website

<http://agacis.rcc-acis.org/>

## October Analysis

Date	Monthly Rainfall in Inches <sup>1</sup>						Weighted Sum	Relative Wetness
	July	Weighted Precip	August	Weighted Precip	September	Weighted Precip		
2018-09-23	1.16	1	6.03	6	7.26	9	16	<b>Wet</b>
<b>30% chance less than**</b>	2.47		2.54		1.91			
<b>30 Year Average**</b>	3.87		3.79		3.58			
<b>30% chance more than**</b>	4.67		4.54		4.37			

McHenry Stratton Lock-Dam

30-Year Precipitation Data (1995-2024) from NOAA Website

<http://agacis.rcc-acis.org/>



1960														
1961														
1962														
1963														
1964														
1965														
1966														
1967														
1968														
1969														
1970														
1971														
1972														
1973														
1974														
1975										1. 13	3.35	2.03	6.51	
1976	0.66	1.71	6.29	4.51	3.48	2.33	2.82	1.55	1. 16	2. 46	0.56	0.32	27. 85	
1977	0.35	0.44	3.61	2.27	4.27	3.68	2.35	3.81	2. 82	2. 93	1.27	1.87	29. 67	
1978	1.15	0.24	0.94	3.24	3.18	4.72	5.57	4.83	5. 24	0. 88	2.05	2.08	34. 12	
1979	4.34	0.78	3.73	4.60	1.29	6.18	1.69	7.44	0. 03	1. 59	2.81	1.64	36. 12	
1980	0.72	0.95	0.78	3.61	2.09	5.36	5.35	5.01	7. 36	1. 93	0.87	2.56	36. 59	
1981	0.03	1.91	0.61	2.87	2.61	4.54	3.13	10.00	2. 78	1. 56	1.61	0.70	32. 35	
1982	2.12	0.36	2.77											5.25
1983	0.31			4.54	4.45	2.02	3.82	5.17	2. 73	4. 09	4.27	2.28	33. 68	
1984	0.73	1.49	2.18	3.91	3.66	2.21	2.57	1.29	2. 74	4. 25	2.26	2.54	29. 83	
1985		1.67	2.85	1.28	3.36	2.04	8.43	3.07	1. 76	5. 93	6.32	1.11	37. 82	
1986	0.36	2.29	1.00	1.96	4.46	4.69	5.87	2.40	10. 70	1. 81	0.71	0.73	36. 98	
1987	0.89	0.02	2.22	3.82	3.81	2.12	3.12	10.80	2. 75	0. 95	2.48	4.82	37. 80	
1988	2.16	0.62	1.68	3.04	1.50	0.73	3.34	3.24	1. 87	2. 00	4.64	1.15	25. 97	
1989	0.60	0.50								1. 00	1.47	0.32	3.89	
1990	2.01	2.05				6.03								10. 09
1991														
1992										0. 68	5.12	2.48	8.28	
1993	3.06	0.62	2.37			10.34	4.36	2.01	3. 47	1. 39	1.67	1.01	30. 30	
1994	1.54	3.58	1.06	1.74	0.97	3.00	4.21	4.37	1. 57	1. 38	5.79	1.18	30. 39	
1995	2.75	0.16	1.68	5.06	3.90	1.85	3.24	4.29	1. 89	4. 96	3.33	0.55	33. 66	
1996	1.15	0.79	0.75	2.96	9.50	4.64	5.51	2.67	1. 61	2. 45	0.95	1.64	34. 62	
1997	1.46	3.67	1.45	1.46	4.64	2.50	2.96	4.08	2. 56	1. 56	1.67	0.88	28. 89	
1998	2.33	1.59	2.79	5.57	3.26	6.47	1.77	4.16	2. 86	6. 12	1.73	1.36	40. 01	
1999	3.09	1.16	0.64	6.31	2.17	7.94	2.71	1.94	5. 22	1. 05	0.40	2.03	34. 66	
2000	1.15	1.11	1.45	3.86	6.46	7.91	M3.70	1.85	5. 49	1. 17	3.39	1.58	39. 12	

2001	0.95	2.37	0.00	3.05	4.30	3.39	2.10	3.77	5.98	7.35	1.15	0.98	35.39
2002	0.72	1.30	1.54	3.26	2.90	3.36	0.56	7.19	2.25	2.32	M0.60	M0.77	26.77
2003	0.31	0.12	1.44	1.64	M5.78	1.95	6.66	M0.91	2.04	1.74	5.22	M2.51	30.32
2004	0.60	M0.56	4.39	1.99	10.25	4.95	1.96	3.47	0.92	2.65	3.11	1.44	36.29
2005	3.42	1.79	0.74	1.71	3.20	1.60	1.88	3.11	2.96	0.44	2.91	0.56	24.32
2006	M2.43	M0.78	3.35	2.74	5.02	4.00	3.19	4.38	3.70	4.55	2.41	2.57	39.12
2007	0.67	1.73	2.92	4.10	1.80	5.97	5.00	12.71	1.35	3.31	0.47	3.17	43.20
2008	1.29	3.46	2.47	4.55	2.84	6.07	4.95	1.93	8.55	2.35	0.96	4.59	44.01
2009	0.81	2.18	3.62	4.17	4.94	6.52	1.67	5.75	1.10	6.76	1.38	3.11	42.01
2010	0.83	0.87	1.48	2.70	5.53	7.10	7.15	2.27	3.02	1.49	1.05	M0.70	34.19
2011	0.71	2.28	3.48	4.88	6.60	3.46	8.41	3.72	2.83	2.23	3.11	2.26	43.97
2012	1.20	1.30	2.12	M3.24	3.11	1.23	2.66	1.68	1.95	2.70	0.46	M1.82	23.47
2013	3.80	2.48	1.88	7.25	2.53	9.69	2.03	2.17	2.67	1.90	2.78	1.45	40.63
2014	1.66	1.87	0.91	3.38	3.23	6.82	3.57	7.16	4.68	3.15	M1.23	M0.54	38.20
2015	1.34	0.79	1.03	3.83	4.46	4.79	4.70	2.63	4.83	1.03	5.50	5.36	40.29
2016	M0.56	M0.89	3.53	2.51	4.22	2.45	5.10	3.53	2.55	3.42	2.64	1.55	32.95
2017	2.32	M1.56	4.42	M4.19	M2.79	M6.49	8.31	2.93	0.06	7.26	1.63	M0.48	42.44
2018	M1.66	M3.01	M0.69	M2.22	5.40	8.11	1.16	6.03	7.26	6.05	M3.04	1.82	46.45
2019	M2.38	3.31	M1.47	M3.88	7.48	3.64	5.77	3.17	12.16	5.94	1.41	2.13	52.74
2020	2.76	0.48	4.55	4.71	8.91	3.80	1.95	2.00	5.28	2.96	1.87	2.27	41.54
2021	2.28	0.91	0.96	1.05	1.46	3.04	1.32	6.21	1.55	4.08	0.54	M1.10	24.50
2022	0.62	M1.37	2.78	6.14	5.35	2.87	5.16	3.50	4.55	1.78	0.93	2.07	37.12
2023	2.03	3.65	2.55	2.33	1.21	2.05	4.79	1.66	3.93	3.26	1.26	2.33	31.05
2024	2.91	0.50	3.54	M3.27	5.93	6.99	6.20	2.89	1.66	0.90	3.55	0.98	39.32
2025	0.31	0.99	2.62	1.81	1.91	2.91	4.42	4.21	M0.88				20.06

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2025-09-19