Wetland Delineation Report

Big Timber & Reinking Roads Site

Town of Rutland, Kane County, Illinois

December 13, 2024

Project Number: 20241389

506 Springdale Street | Mount Horeb, WI 53572 | www.heartlandecological.com

Big Timber & Reinking Roads Site

Town of Rutland, Kane County, Illinois

December 13, 2024

Prepared for:

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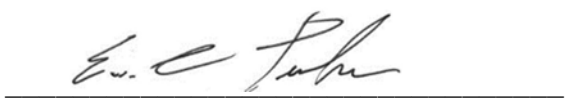

Lead Investigator and Final Reviewer:
Eric C. Parker, SPWS

Solutions for people, projects, and ecological resources.

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1.0 Introduction

Heartland Ecological Group, Inc. ("Heartland") completed a wetland determination and delineation on the Big Timber and Reinking Roads site on November 6, 2024 at the request of Surya Powered LLC. Fieldwork was completed by Eric C. Parker, SPWS (Appendix E, Qualifications). The 108.64-acre site (the "Study Area") is southwest of the intersection of Interstate Highway (IH) 90 and Illinois Route (IR) 47, in Sections 18, 19, and 20, T42N, R7E, Town of Rutland, Kane County, IL (Figure 1, Appendix A). The purpose of the wetland determination and delineation was to determine the location and extent of wetlands and jurisdictional waterways or water bodies within the Study Area.

Five (5) wetland areas totaling approximately 3.78 acres were delineated and mapped within the Study Area (Figure 6, Appendix A). One (1) waterway, the Kishwaukee River, and no (0) waterbodies (e.g., lakes, reservoirs, or ponds) were observed within, or immediately adjacent to, the Study Area. One (1) ADID wetlands are mapped within the Study Area. ADID wetland #440 is mapped just outside the Study Area to the southeast and ADID wetland #434 is just inside the study area to the southwest (ADID exhibit, Appendix A).

Wetlands, waterways, and water bodies 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.

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) *WI 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* mapping (Figure 4, Appendix A), and the Illinois Geospatial Data Clearinghouse's *Illinois Height Modernization (ILHMP): LiDAR data* (Figure 5, Appendix A). The USGS *National Hydrography Dataset* is included on Figures 2 and 4, Appendix A. A map showing Kane County ADID (Advanced Identification) wetlands is included in 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.

Atypical conditions were encountered within the Study Area due to the presence of agricultural fields including row-cropping in areas with soils that may be hydric based on the *Web Soil Survey*. Therefore, procedures for managed plant communities in the *Problematic hydrophytic vegetation* section described in Chapter 5 of the Regional Supplement were used. Historical aerial imagery was reviewed for evidence of crop stress, saturation, or inundation signatures. Sample point placements for the wetland delineation were partially determined based on such signatures.

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).

Given the farmed status of the wetlands that were delineated, a Floristic Quality Assessment (FQA) was not completed.

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 on 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 and Growing Season

According to the APT analysis using the previous 90 days of precipitation data, conditions encountered at the time of the November 6, 2024 fieldwork were expected to be drier than 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 in the mild drought range. 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, depressions, swales, and slopes. A topographic high of approximately 918 feet above mean sea level (msl) is

found in the northwest portion of the Study Area adjacent to Reinking Road. Topographic lows of approximately 902 feet above msl may be found along the bank of the Kishwaukee River near the southern edge of the Study Area (Figures 2 and 5, Appendix A). Land use within the Study Area consisted primarily of agricultural row cropping. Surrounding areas are composed of mostly of other agricultural properties, with some commercial and residential properties to the southeast. General drainage is to the south following lower elevation topographic breaks to the Kishwaukee River.

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 soils (Figure 3, Appendix A).

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

Soil symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
103A: Houghton muck, 0-2% slopes	Houghton-Muck	84-95	Depressions	Yes
	Houghton-Ponded	2-5	Depressions	Yes
		1-3	Lakebeds (relict)	Yes
	Adrian	1-3	Lakebeds (relict)	Yes
	Willette-Muck	0-3	Depressions	Yes
	Edwards	1-2	Depressions	Yes
125A: Selma loam, 0-2% slopes	Selma-Drained	88-100	Lake plains, stream terraces, outwash plains	Yes
	Harpster-Drained	0-3	Depressions on outwash plains and lake plains	Yes
	Orthents, loamy	0-3	Outwash plains, lake plains	No
	Urban land	0-3	Ground moraines	No
	Houghton-Drained	0-3	Depressions on outwash plains and lake plains	Yes
134C2: Camden silt loam, 5-10% slopes, eroded	Camden-Eroded	90-98	Stream terraces	No
	Drummer-Drained	1-4	Stream terraces and swales on outwash plains and till plains	Yes

	Huntsville-Occasionally flooded	0-2	Flood plains	No
	Millbrook	0-2	Stream terraces	No
	Senachwine-Eroded	0-2	End and ground moraines	No
149A: Brenton silt loam, 0-2% slopes	Brenton	91-100	Outwash plains, stream terraces	No
	Drummer-Drained	0-9	Swales on till plains and outwash plains	Yes
152A: Drummer silty clay loam, 0-2% slopes	Drummer-Drained	90-100	Stream terraces and swales on outwash plains and till plains	Yes
	Peotone-Drained	0-9	Depressions on outwash plains	Yes
	Harpster-Drained	0-9	Depressions on outwash plains	Yes
219A: Millbrook silt loam, 0-2% slopes	Millbrook	90	Outwash plains, stream terraces	No
	Pella	3	Ground moraines, outwash plains, lake plains	Yes
	Drummer	3	Outwash plains, ground moraines	Yes
570B: Martinsville silt loam, 2-4% slopes	Martinsville	92	Stream terraces, outwash plains	No
	Selma	3	Outwash plains, stream terraces	Yes
	Pella	3	Ground moraines, outwash plains, lake plains	Yes
662B: Barony silt loam, 2-5% slopes	Barony	92	Stream terraces, outwash plains	No
	Drummer	3	Outwash plains, ground moraines	Yes
663A: Clare silt loam, 0-2% slopes	Clare	92-100	Outwash plains, stream terraces	No
	Drummer-Drained	0-8	Outwash plains, stream terraces	Yes
668B: Somonauk silt loam, 2-5% slopes	Somonauk	92	Outwash plains, stream terraces	No
	Drummer	3	Outwash plains, ground moraines	Yes

Wetland and ADID Mapping

The National Wetlands Inventory (NWI) mapping (Figure 4, Appendix A) identifies one (1) wetland area within the Study Area, a riverine wetland (R5UBH) located along the banks of the Kishwaukee River on the south boundary. One (1) "high functional value" ADID wetland (USEPA and USACE, 2004) is mapped within the Study Area, wetland #434, along the southwest boundary. ADID wetland #440 is mapped immediately southeast of the Study Area (Appendix A).

Waterway and Water Body Mapping

The NHD data included on Figures 2 and 4 (Appendix A) identifies one (1) waterway, the Kishwaukee River, located along the southern boundary of the Study Area. No waterbodies are depicted in the Study Area itself, but waterbodies are mapped offsite to the immediate west and south of the Study Area. One of these waterbodies appear to be artificial pond for agricultural properties to the south, while another appears to be an occasionally flooded depression to the west of the Study Area.

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 (Appendix F). From the aerial imagery, in farmed depressional and swale areas, the primary wetland hydrology indicator of Inundation Visible on Aerial Imagery (B7) and the secondary wetland hydrology indicators of "Saturation Visible on Aerial Imagery" (C9) and "Stunted or Stressed Plants" (D1) were noted.

A total of 28 aerial images were selected and reviewed based on availability and quality of the imagery. Of these images, 17 were taken under normal antecedent precipitation conditions. Signatures were noted in six (6) locations within landscape positions described by the NRCS to support hydric soil components and were the focus of the Off-Site Analysis. At least five (5) of the seven (7) described wetland signatures per the July 2016 Guidance were consistently noted in these areas on imagery taken under normal antecedent precipitation. In imagery taken under both wet and dry antecedent precipitation conditions, such wetland signatures were similarly noted in the same six (6) areas.

Based on the Off-Site Analysis, six (6) areas were potentially wetland prior to the fieldwork. Three (3) areas were determined to be wetlands without a field review based on their high percentage of normal years with wet signatures present and hydric soils. Three (3) were

potentially wetland depending on the results of fieldwork. Based on Heartland's fieldwork on November 6, 2024, five (5) of the six (6) areas were determined to be wetland. The final wetland boundary and wetland determinations were completed in the field based on the extent of hydric soils and the presence of field-based wetland hydrology indicators.

3.2 Field Review

Five (5) wetland areas were identified and delineated within the Study Area. Wetland determination data sheets (Appendix C) were completed at 15 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

Wetland ID	Wetland Description	*Surface Water Connections	Acreage (on-site)
W-1	Farmed Wet Meadow	Appearing Isolated in the Landscape	0.39
W-2	Farmed Wet Meadow	Appearing Isolated in the Landscape	1.74
W-3	Farmed Wet Meadow	Appearing Isolated in the Landscape	0.48
W-4	Farmed Wet Meadow	Appearing Isolated in the Landscape	0.36
W-5	Farmed Wet Meadow	Connected to the Kishwaukee River	0.82
*Classification based on Heartland's professional opinion. USACE has authority for determining federal jurisdiction of wetlands and waterways. Local zoning authorities may have additional restrictions. **See Appendix F.			**3.78**

Wetlands 1 and 5 (W-1 and W-5)

Wetlands 1 and 5 (W-1 and W-5) are farmed wet meadows. W-1 is positioned within the northwest corner of the study area and W-5 is positioned along the southern boundary in the western portion of the Study Area. The boundaries generally coincided with a poorly defined topographic break preliminarily determined in the Off-Site Analysis and revised in the field based on the extent of hydric soils and/or field-based hydrology indicators.

Wetlands W-1 and W-5 both lacked normal circumstances because of soybean cropping during the 2024 growing season. Due to the results from the Off-Site Analysis, landscape position, hydrological and soil wetland indicators, and nearby vegetation, it was assumed

that hydrophytic vegetation would dominate in both wetlands under normal circumstances. Both W-1 and W-5 may be classified as farmed wet meadow communities.

The Depleted Matrix (F3) and Redox Depressions (F8) indicators were present in W-1, while the Redox Dark Surface (F6) indicator was noted in W-5. The presence of these hydric soil indicators satisfied the hydric soil parameter within both W-1 and W-5.

No primary wetland indicators were present within W-1; however, the Saturation Visible on Aerial Imagery (C9) and the Stunted or Stressed Plants (D1) secondary indicators were both noted. The presence of two secondary indicators satisfies the hydrology parameter for wetlands within W-1. Within W-5, the same secondary indicators were observed; and the primary indicators of High Water Table (A2) and Saturation (A3) were also noted. Through the presence of these indicators, the hydrology parameter was met within W-5.

Wetlands 2, 3, and 4 (W-2, W-3, and W-4)

Wetlands 2, 3, and 4 (W-2, W-3, and W-4) are isolated depressions within an agricultural field to the west of Reinking Road. These wetlands all lacked normal circumstances due to vegetation disturbance caused by soybean cropping during the 2024 growing season. The results of the Off-Site Analysis, landscape position, presence of hydrologic and soil indicators, and professional judgement led the delineator to conclude that hydrophytic vegetation would be dominant under normal circumstances. These wetlands may be classified as farmed wet meadow.

The Depleted Matrix (F3) hydric soil indicator was noted within W-2, W-3, and W-4. The presence of this indicator satisfies the hydric soil parameter for wetlands.

The secondary indicators of Saturation Visible on Aerial Imagery (C9), Stunted or Stressed Plants (D1), and Geomorphic Position (D2) were present within all three wetlands. The primary indicator of Inundation Visible on Aerial Imagery (B7) was also identified within W-2 and W-3. The wetland hydrology parameter is met within W-2, W-3, and W-4 through the presence of these indicators.

Waterways and Water Bodies

One (1) waterway, the Kishwaukee River, was identified and mapped along the southern boundary of the study area. The approximate OHWM of the Kishwaukee River is represented in Appendix A, Figure 6.

3.3 Other Considerations

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

4.0 Conclusion

Heartland completed a wetland determination and delineation on the Big Timber and Reinking Roads Site on November 6, 2024, at the request of Surya Powered LLC. Fieldwork was completed by Eric C. Parker, SPWS (Appendix E, Qualifications). The 108.64-acre Study Area is southwest of the intersection of IH 90 and IR 47, in Sections 18, 19, and 20, T42N, R7E, Town of Rutland, Kane County, IL (Figure 1, Appendix A).

Five (5) wetland areas totaling approximately 3.78 acres were delineated and mapped within the Study Area (Figure 6, Appendix A). One (1) waterway, the Kishwaukee River, was observed within the Study Area. One (1) highly functional value ADID wetland (#434), as depicted on Kane County GIS mapping, is partially within the Study Area.

Wetlands, waterways, and water bodies discussed in this report may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the IEPA, Kane County, and the local zoning authority. Heartland recommends this report be submitted to the USACE and IEPA for final jurisdictional review and concurrence. Review by County and local authorities may be necessary for determination of 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. 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 influence the findings may include but are not limited to precipitation patterns, drainage modifications, changes or modification to vegetation, and the time of year.

5.0 References

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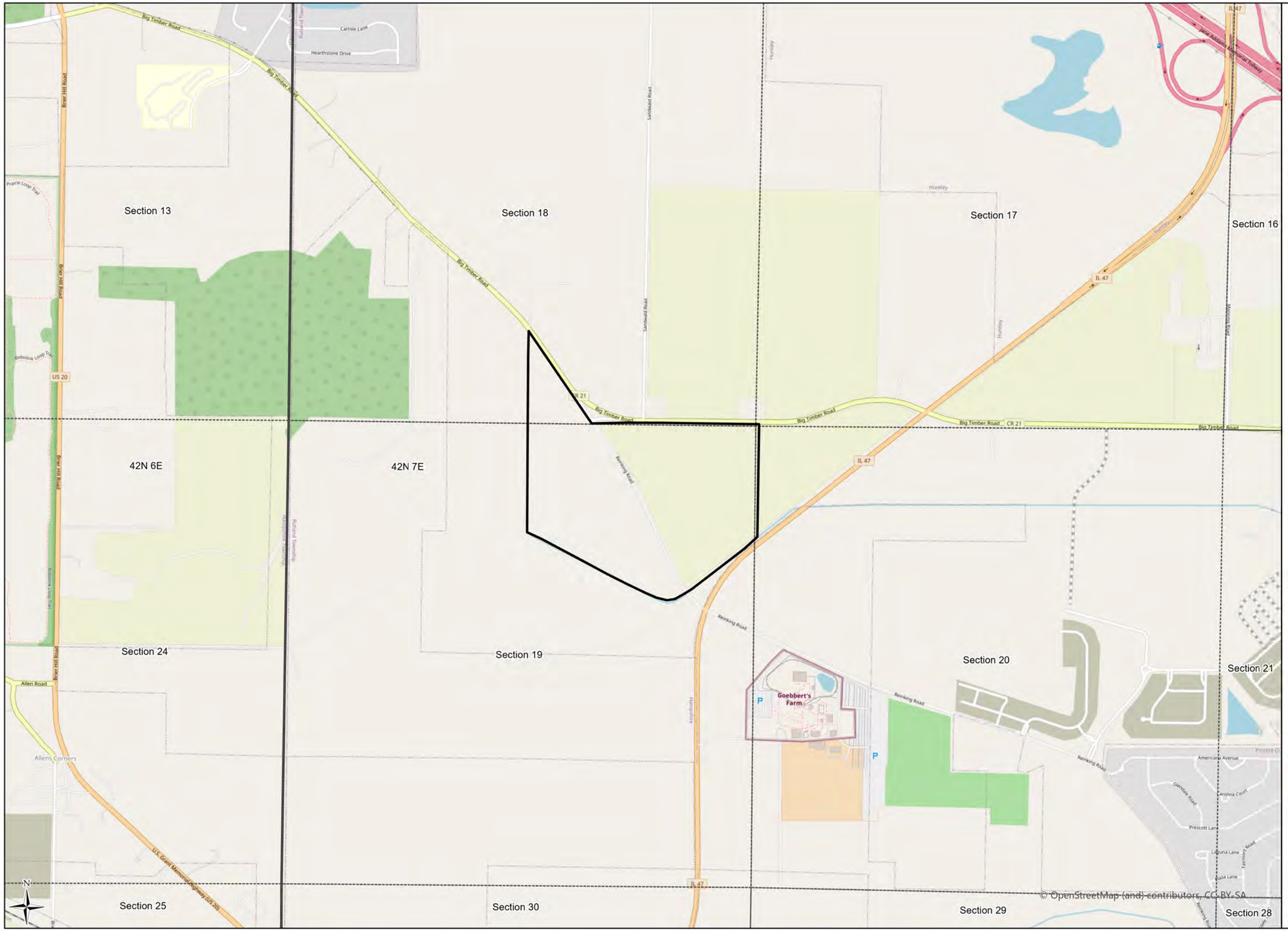
Appendix A | Figures and Kane County ADID Map



Study Area (108.64 ac)
Section
Township

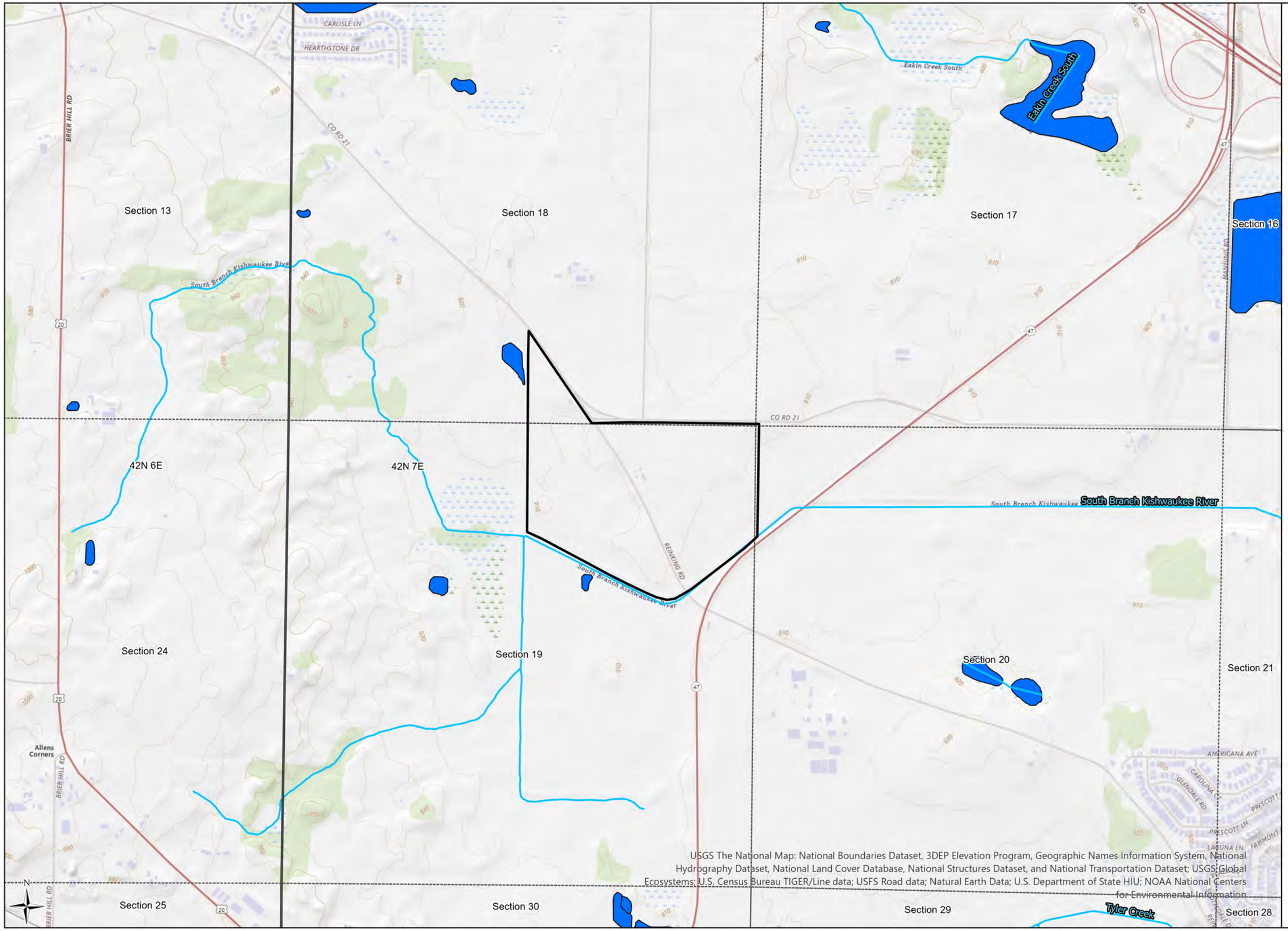
0 500 1,000 Ft

Heartland ECOLOGICAL GROUP INC

Figure 1. Project Location
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

OpenStreetMap
ESRI
LRR: NCNE

Figure Created: 10/16/2024



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Heartland
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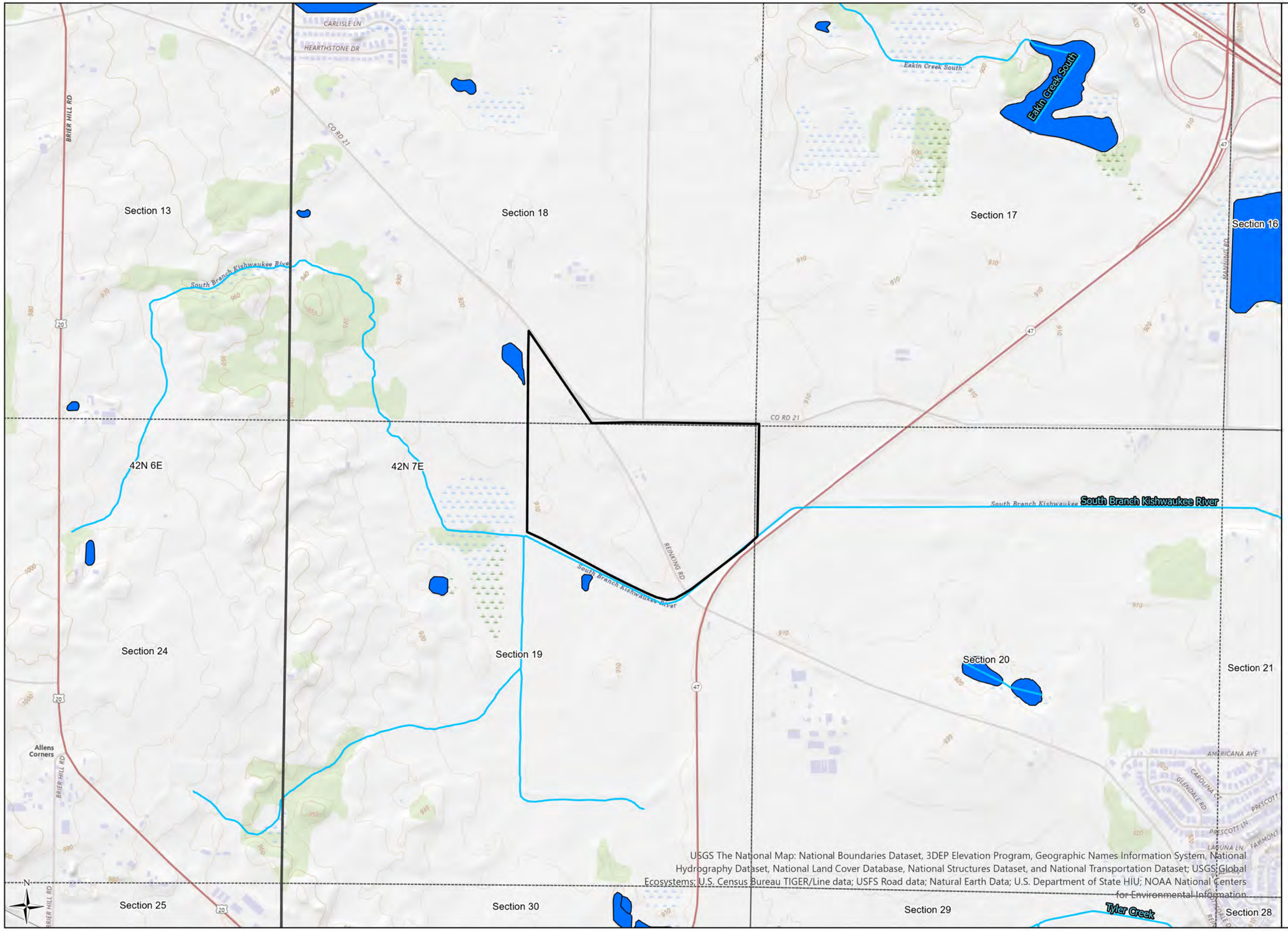
Figure 2. USGS Topography
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

USGSTopo
USGS
LRR: NCNE

Figure Created: 10/16/2024



Study Area (108.64 ac)
Section
Township
NHD Waterway
NHD Waterbody

0 500 1,000 Ft

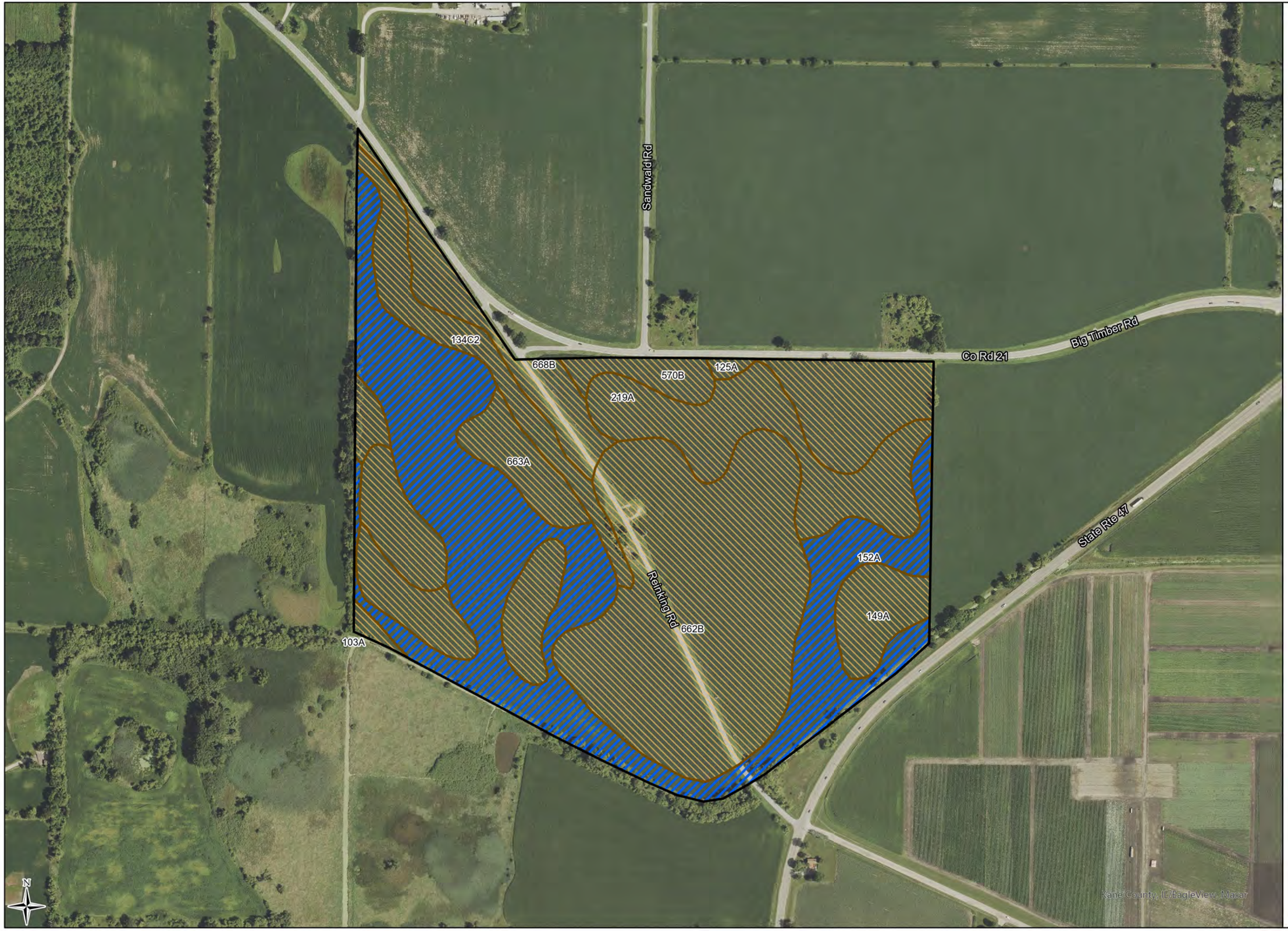
USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS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

Heartland
ECOLOGICAL GROUP INC

Figure 2. USGS Topography
Kane County Site
Project #20241389
T42N, R7E, S18, S19, S20
T Rutland, Kane Co

USGSTopo
USGS LRR: NCNE

Figure Created: 10/15/2024



Study Area (108.64 ac)

Hydric Soils

- Hydric
- Non-Hydric

0 200 400 Ft

Heartland ECOLOGICAL GROUP INC

Figure 3. NRCS
Hydric Soils
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2023 NAIP
NRCS, Kane County
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)
NWI Wetlands
NHD Waterway
NHD Waterbody

0 200 400 Ft

Heartland
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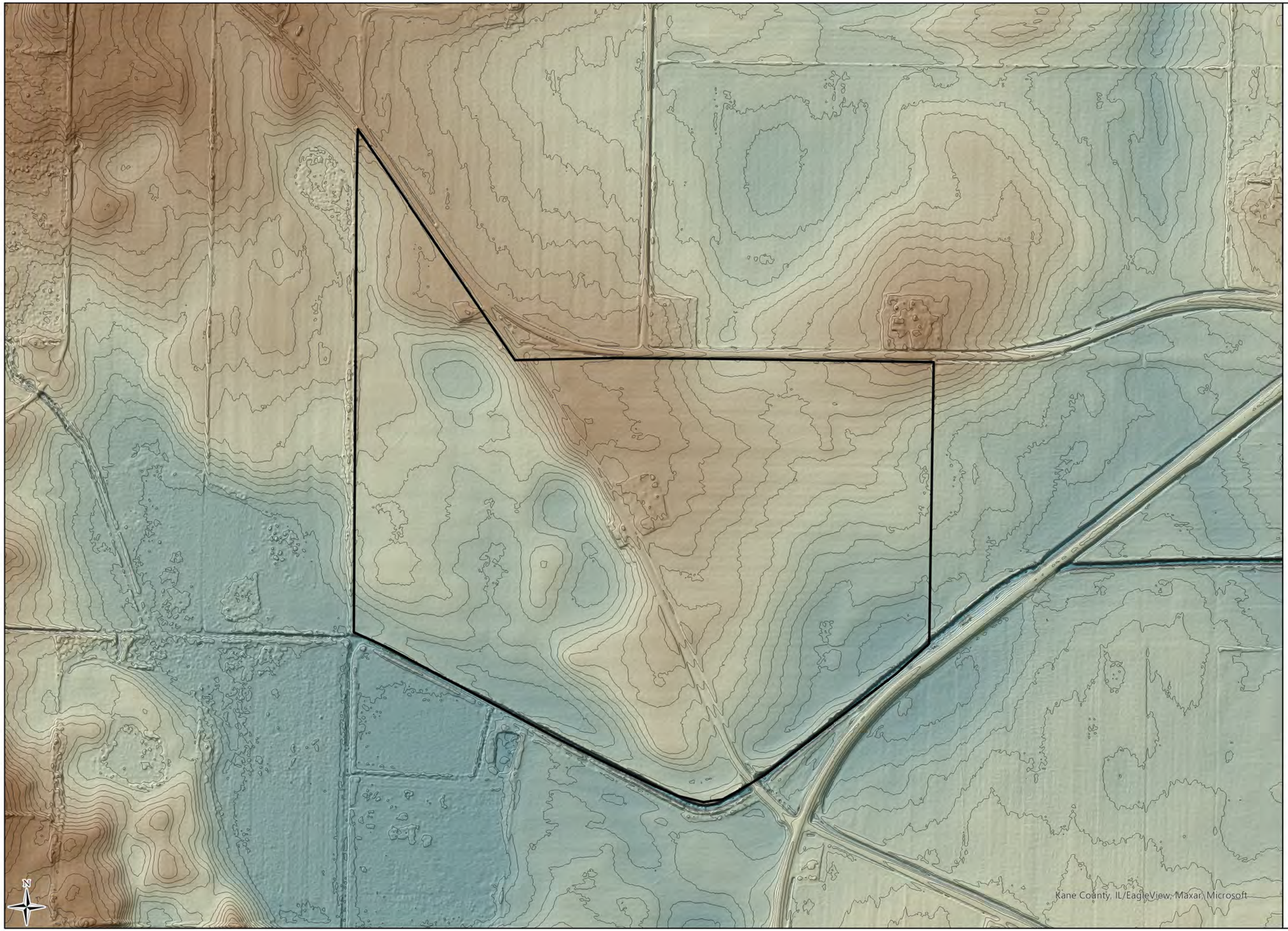
Figure 4. National Wetland Inventory
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2023 NAIP
USGS
LRR: NCNE

Figure Created: 10/16/2024



Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Figure 5. Color-Stretch Digital Elevation Model
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

DNR Lidar Service
Kane Co., IDNR
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

Kane County Contours

Field Delineated Wetland Boundaries (3.78 ac)

Waterways

Sample Points

Upland

Wetland

0 175 350 Ft

Heartland ECOLOGICAL GROUP INC

Figure 6. Field Delineated Wetland Boundaries

Kane County 107.87-Acre Site

Project #20241389

T42N, R7E, S18, S19, S20

Town of Rutland, Kane Co, IL

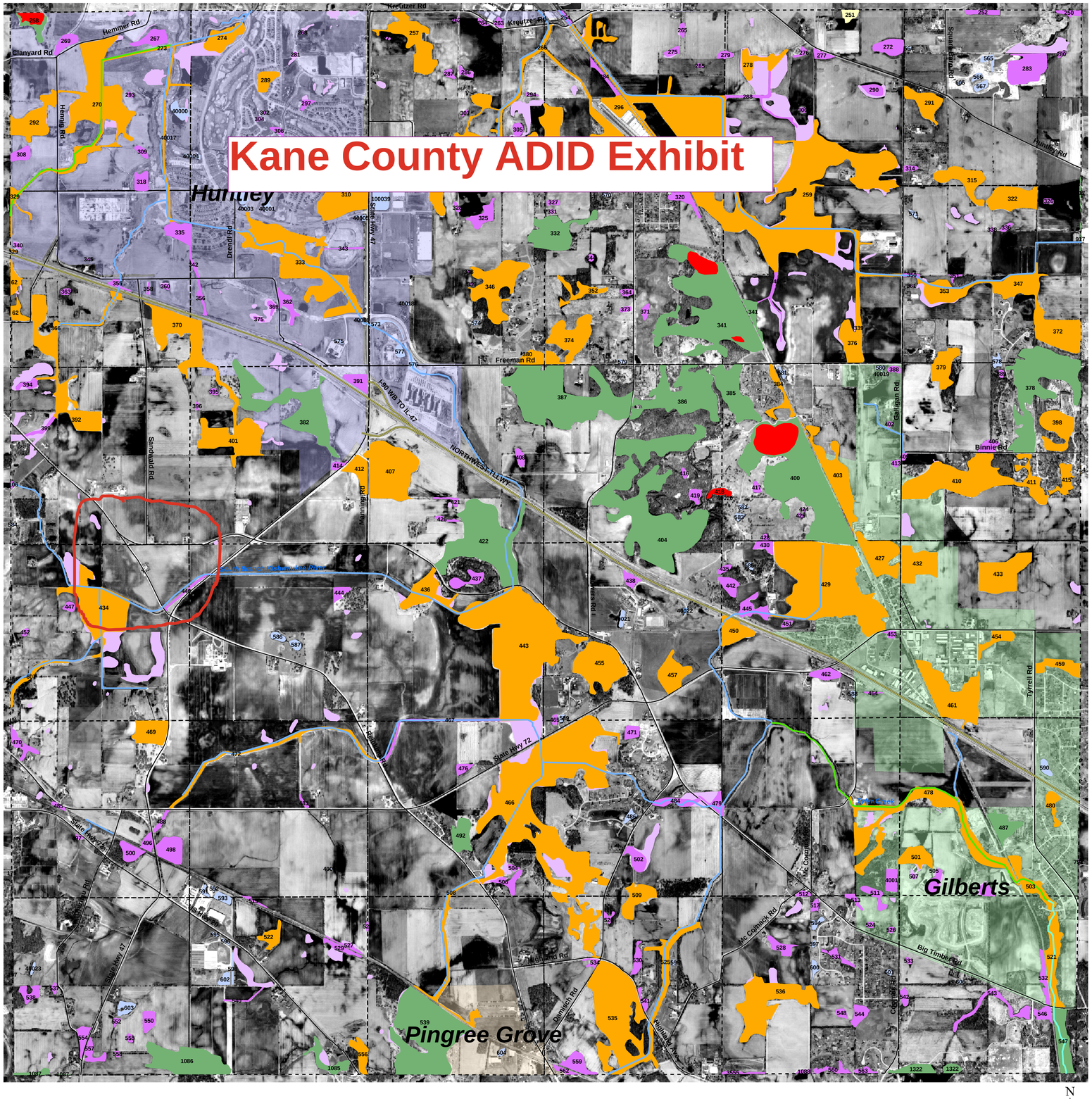
2023 NAIP

HEG

LRR: NCNE

Figure Created: 11/11/2024

Kane County Advanced Identification of Aquatic Resources (ADID) Rutland Township



Kane County Townships

Hampshire | Rutland | Dundee
Burlington | Plato | Elgin
Virgil | Campton | St Charles
Kaneville | Blackberry | Geneva / Batavia
Big Rock | Sugar Grove | Aurora

This map was produced under the Advanced Identification (ADID) Program of the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers. Descriptions of the wetland inventory methodology and the wetland and stream designation criteria are available in the Kane County ADID Study Methodology.

The wetland boundaries shown are not jurisdictional delineations.

Note: Although the aerial photography displayed on this mapwas taken in 2001, the ADID data was based on aerial photography taken in 1996-1998 and then updated with photography from 2000. For this reason some features present on the 2001 photography may not be reflected in the ADID data.

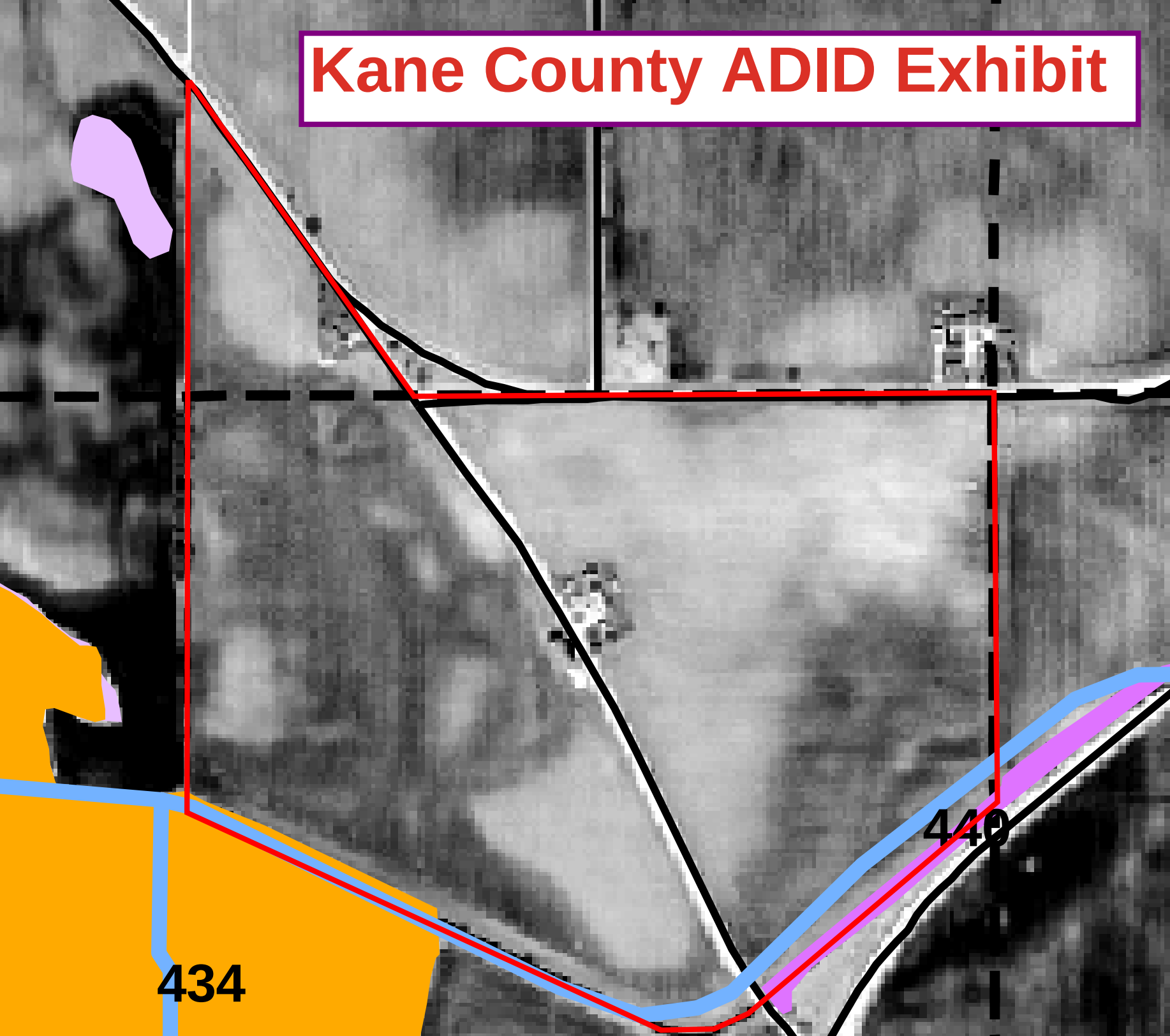
Date of Map Creation: August 30, 2004
L. Barghusen, Senior Environmental Analyst

Watersheds and Non-point Source Programs Branch
Region 5
U.S. Environmental Protection Agency

Regulatory Branch
U.S. Army Corps of Engineers

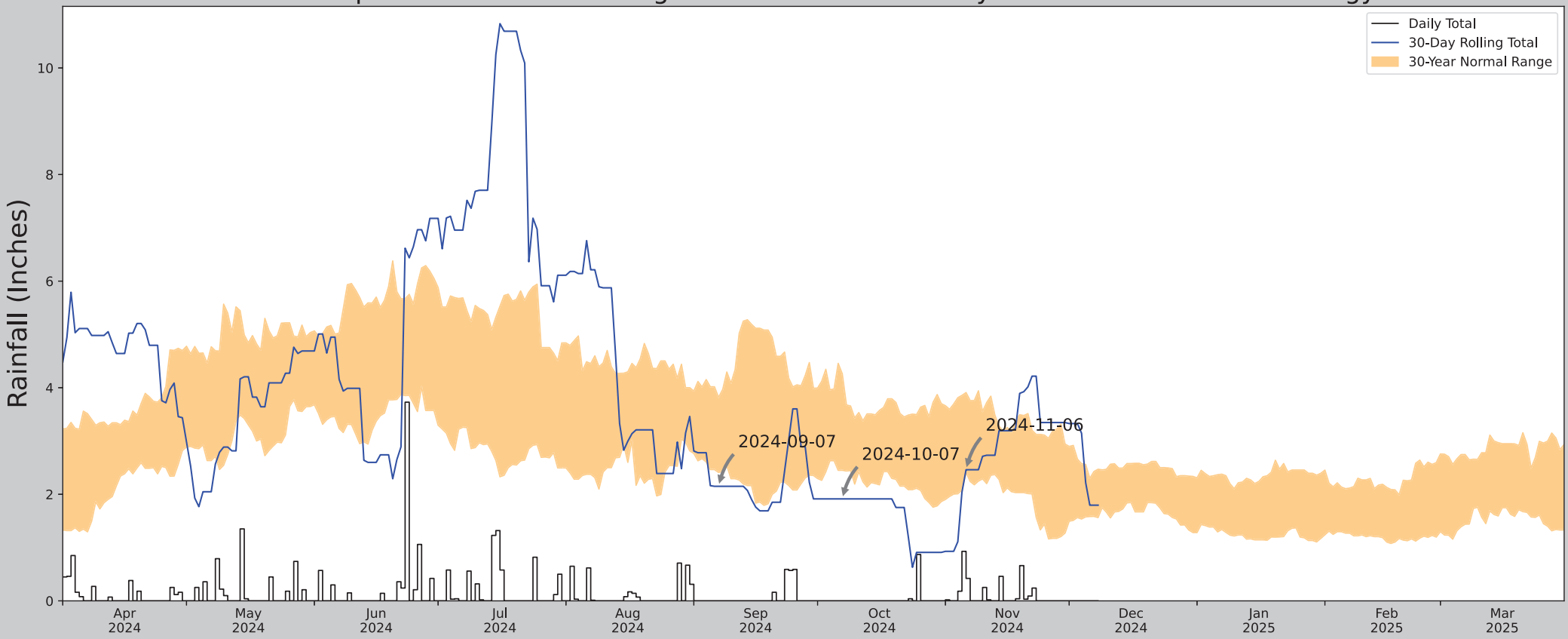
US Army Corps of Engineers

northeastern illinois planning commission


Kane County ADID Exhibit
440
434

Appendix B | APT Analysis

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



Coordinates	42.1081410, -88.4572961
Observation Date	2024-11-06
Elevation (ft)	914.337
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-06	2.41063	3.908268	2.46063	Normal	2	3	6
2024-10-07	2.449606	4.259055	1.913386	Dry	1	2	2
2024-09-07	2.409055	3.819291	2.149606	Dry	1	1	1
Result							Drier than Normal - 9

US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

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
CRYSTAL LAKE 4NW	42.2611, -88.3953	931.102	11.035	16.765	5.151	10478	85
CRYSTAL LAKE 3.9 WNW	42.2613, -88.3954	930.118	0.015	0.984	0.007	3	3
CRYSTAL LAKE 1.0 WSW	42.2288, -88.3496	894.029	3.232	37.073	1.574	362	2
WOODSTOCK 0.8 SSW	42.3003, -88.4433	948.163	3.655	17.061	1.707	88	0
CRYSTAL LAKE 1.9 SW	42.2147, -88.3588	903.871	3.71	27.231	1.771	20	0
WOODSTOCK 0.7 SW	42.3053, -88.4473	967.848	4.049	36.746	1.971	44	0
BULL VALLEY 2.5 WNW	42.3245, -88.3946	958.005	4.381	26.903	2.089	188	0
WOODSTOCK 3.8 SW	42.2755, -88.495	866.142	5.194	64.96	2.675	18	0
ALGONQUIN 0.7 N	42.1739, -88.2993	832.021	7.774	99.081	4.269	1	0
WOODSTOCK 5NW	42.3628, -88.5314	946.85	9.886	15.748	4.604	54	0
MCHENRY STRATTON LOCK/DAM	42.3097, -88.2533	735.892	7.998	195.21	5.16	95	0
MARENGO	42.2636, -88.6078	814.961	10.867	116.141	6.152	2	0

Appendix C | Wetland Determination Data Sheets

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P1

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 18 T042N R007E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.111989 Long: -88.461894 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

✓ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Weeds not present; some soybean germination from seed spillage. Adjacent field edge 25 feet to west dominated by Salix interior, Phalaris, and Rubus occidentalis. Assumed hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR 4/1	80	10YR 4/3	20	C	M	SICL	
13-18	10YR 4/2	80	10YR 4/4	20	C	M	SICL	
18-24	10YR 5/2	80	10YR 5/4	20	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed. Consistent signature.

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P2

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 18 T042N R007E

Landform (hillslope, terrace, etc.): Sideslope Local relief (concave, convex, none): None

Slope (%): 3-7 Lat: 42.111300 Long: -88.443600 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Weeds not present; some soybean germination from seed spillage. Assumed non-hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 3/1	100					SICL	No redox
15-18	10YR 4/1	95	10YR 4/2	5	C	M	SICL	
18-24	10YR 4/2	90	10YR 4/4	10	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed.

Remarks:

No wetland hydrology indicators observed, no saturation. Tile network influencing this area, no D2.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P3

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 18 T042N R007E

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.110356 Long: -88.460991 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. VERONICA ARVENSIS	5	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	5.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	5 (A)		20.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Sparse weeds present; some soybean germination from seed spillage.

SOIL

Sampling Point: P3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR 3/1	100					L	No redox
13-18	10YR 5/2	60	10YR 5/6	20	C	M	SL	Mixed matrix
	10YR 3/1	20					SL	
18-24	10YR 3/1	95	10YR 3/3	5	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed.

Remarks:

No wetland hydrology indicators observed, no saturation. Tile network present, no D2.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P4

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 18 T042N R007E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.110061 Long: -88.460471 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 ✓ No ____	**Is the Sampled Area within a Wetland?** **Yes ✓ No ____**
Hydric Soil Present?	Yes ✓ No ____	
Wetland Hydrology Present?	Yes ✓ No ____	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ✓ No ____**

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Weeds not present; some soybean germination from seed spillage. Assumed hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	100					L	No redox
8-15	10YR 4/1	90	10YR 4/3	10	C	M	L	
15-20	10YR 4/2	90	10YR 4/4	10	C	M	L	
20-24	10YR 2/1	100					SIL	No redox

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ✓ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed.

Remarks:

Tile network present, but assumed to be sufficiently dysfunctional given the other parameters, the OSA, landscape position, other hydrology indicators, and professional judgment.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P5

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.107509 Long: -88.457940 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 ✓ No _____	**Is the Sampled Area within a Wetland?** **Yes ✓ No _____**
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ✓ No _____**

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Weeds not present; some soybean germination from seed spillage. Assumed hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P5

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/1	100					L	No redox
8-16	10YR 4/1	90	10YR 4/4	10	C	M	L	
16-24	10YR 3/1	100					SIL	No redox

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed.

Remarks:

Consistent signature area. Tile network present but assumed to be sufficiently dysfunctional given the OSA, other hydrology parameters, landscape position, and professional judgment.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P6

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 18 T042N R007E

Landform (hillslope, terrace, etc.): Saddle Local relief (concave, convex, none): Convex

Slope (%): 0-2 Lat: 42.107858 Long: -88.458052 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Weeds not present; some soybean germination from seed spillage. Assumed non-hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P6

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 4/1	100					SIL	No redox
15-20	10YR 4/1	95	10YR 4/2	5	C	M	SICL	
20-24	10YR 5/2	85	10YR 4/4	15	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed. Between consistent signature areas.

Remarks:

No wetland hydrology indicators observed, no saturation. Tile network present and assumed to be sufficiently functional in this area.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P7

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.108207 Long: -88.458384 Datum: WGS84

Soil Map Unit Name: Clare 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 ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Weeds not present; some soybean germination from seed spillage. Assumed hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P7

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/1	100					L	No redox
8-20	10YR 4/1	93	10YR 4/3	7	C	M	SICL	
20-24	10YR 4/1	90	10YR 4/3	10	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ✓ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed.

Remarks:

Consistent signature area. Tile network present but assumed to be sufficiently dysfunctional in this depression.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P8

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 18 T042N R007E

Landform (hillslope, terrace, etc.): Sideslope Local relief (concave, convex, none): None

Slope (%): 0-2 Lat: 42.106177 Long: -88.459792 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. VERONICA ARVENSIS	5	Y	FACU
2. Taraxacum officinale	2	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	7.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	7	x 4 =	28
UPL species	0	x 5 =	0
Column Totals:	7 (A)		28.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Sparse weeds present; some soybean germination from seed spillage. Adjacent field edge 50' to west dominated by Bromus inermis.

SOIL

Sampling Point: P8

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/1	100					L	No redox
14-24	10YR 3/1	100					SIL	No redox

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed. Signature noted and prelim (offsite) wetland determination, but not as consistent as other signatures.

Remarks:

No field wetland hydrology indicators observed, no saturation. Ditch waterway off-site and adjacent to the west. Water level in waterway approx 8-9 feet below field elevation. Tile network present and assumed to be sufficiently functional at P8.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P9

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 18 T042N R007E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.105961 Long: -88.458840 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 √ No _____	**Is the Sampled Area within a Wetland?** Yes √ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

✓ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes √ No _____

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed. Not NC. Weeds not present; some soybean germination from seed spillage. Adjacent field edge 80' to west dominated by Bromus inermis, Ambrosia trifida and Urtica dioica. Assumed hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P9

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/1	93	10YR 3/3	7	C	M	SIL	
16-24	10YR 5/2	85	10YR 5/4	15	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed.

Remarks:

Tile network present, but assumed to be sufficiently dysfunctional at P9.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P10

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.105681 Long: -88.458116 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed. Not NC. Weeds not present; some soybean germination from seed spillage. Assumed hydrophytic vegetation would dominate under NC given the OSA, landscape position, the other parameters, and professional judgment.

SOIL

Sampling Point: P10

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 3/1	95	10YR 3/3	5	C	M	SIL	
15-24	10YR 4/1	93	10YR 4/3	7	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 3

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed.

Remarks:

Tile network present, but appearing to be dysfunctional at P10. Assumed D2 based on hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P11

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Rise Local relief (concave, convex, none): Convex

Slope (%): 0-2 Lat: 42.105399 Long: -88.457973 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Outside ag field in area not cropped for many years, considered NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer negundo	7	Y	FAC
2. Morus alba	5	Y	FAC
3.			
4.			
5.			
	12.0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5' radius)			
1. Bromus inermis	80	Y	FACU
2. Cirsium arvense	20	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100.0	= Total Cover	
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	12	x 3 =	36
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	112 (A)		436.00 (B)

Prevalence Index = B/A = 3.89

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Outside agricultural field in area between field and drainage ditch.

SOIL

Sampling Point: P11

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/1	100					SIL	No redox
14-24	10YR 5/3	50	10YR 5/6	10	C	M	SICL	Mixed matrix
	10YR 4/1	40					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery

Remarks:

No field wetland hydrology indicators observed, no saturation. Ditch waterway approximately 20ft to west. Water level in waterway approx 8-9 feet below P11 elevation.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P12

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 3-7 Lat: 42.105462 Long: -88.457597 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. VERONICA ARVENSIS	3	Y	FACU
2. Taraxacum officinale	3	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	6.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	6	x 4 =	24
UPL species	0	x 5 =	0
Column Totals:	6 (A)		24.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Sparse weeds present; some soybean germination from seed spillage. Adjacent field edge 75 feet to west dominated by Bromus inermis, Acer negundo, and Arctium minus.

SOIL

Sampling Point: P12

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/1	100					SIL	No redox.
16-24	10YR 4/2	95	10YR 4/4	5	C	M	SCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed. Signature noted and prelim (offsite) wetland determination, but not as consistent as other signatures.

Remarks:

No field wetland hydrology indicators observed, no saturation. Ditch waterway off-site and adjacent to the west. Water level in waterway approx 8-9 feet below field elevation. Tile and ditch drainage network present.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P13

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Rise Local relief (concave, convex, none): Convex

Slope (%): 3-7 Lat: 42.102850 Long: -88.454178 Datum: WGS84

Soil Map Unit Name: Somonauk silt loam, 2 to 5 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 ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. VERONICA ARVENSIS	1	N	FACU
2. Taraxacum officinale	1	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	2.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	2 (A)		8.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Sparse weeds present; some soybean germination from seed spillage. Adjacent field edge 25 feet to south dominated by Bromus inermis, Lonicera maackii, and Acer negundo.

SOIL

Sampling Point: P13

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	100					L	No redox
12-24	10YR 5/4	80					SIL	Mixed matrix
	10YR 4/2	20					SIL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed. Signature noted and prelim (offsite) wetland determination, but determined not to be due to wetness.

Remarks:

No field wetland hydrology indicators observed, no saturation. Ditch waterway off-site and adjacent to the south. Water level in waterway approx 8-9 feet below field elevation. Tile network present, no D2.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P14

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Rise Local relief (concave, convex, none): Convex

Slope (%): 3-7 Lat: 42.106016 Long: -88.453593 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Cirsium arvense	10	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	10.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	10 (A)		40.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Weeds present; some soybean germination from seed spillage. Adjacent field edge 8 feet to southeast dominated by Bromus inermis, Asclepias syriaca, and Cirsium arvense.

SOIL

Sampling Point: P14

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/2	100					L	No redox
18-24	10YR 5/2	50	10YR 5/6	20	C	M	SCL	Mixed matrix
	10YR 4/2	30					SCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed. Signature noted and prelim (offsite) wetland determination, but determined not to be due to wetness.

Remarks:

No field wetland hydrology indicators observed, no saturation. Ditch waterway off-site and adjacent to the south. Water level in waterway approx 8-9 feet below field elevation. Tile and ditch drainage network present, no D2.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 20241389 Kane Co 107.87-Ac Property City/County: Kane County Sampling Date: 2024-11-06

Applicant/Owner: Surya Powered State: Illinois Sampling Point: P15

Investigator(s): Eric C Parker, SPWS Section, Township, Range: sec 19 T042N R007E

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.106697 Long: -88.452913 Datum: WGS84

Soil Map Unit Name: Drummer silty clay 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
APT analysis indicates climatic conditions are in the drier than normal range. Ag field planted in soybeans, now harvested; not NC.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Setaria faberi	1	N	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	1.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	1	x 4 =	4
UPL species	0	x 5 =	0
Column Totals:	1 (A)		4.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

Ag field planted in soybeans in 2024 now harvested and chisel plowed . Not NC. Sparse weeds present; some soybean germination from seed spillage. Adjacent field edge 100 feet to southwest dominated by Bromus inermis and Cirsium arvense.

SOIL

Sampling Point: P15

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	100					SIL	No redox
18-24	10YR 3/1	95	10YR 3/3	5	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
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- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

GE and NAIP aerial imagery; OSA completed. Signature noted and prelim (offsite) wetland determination, but not as consistent as other signatures.

Remarks:

No field wetland hydrology indicators observed, no saturation. Ditch waterway off-site and adjacent to the southwest. Water level in waterway approx 8-9 feet below field elevation. Tile and ditch drainage network present, no D2.

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

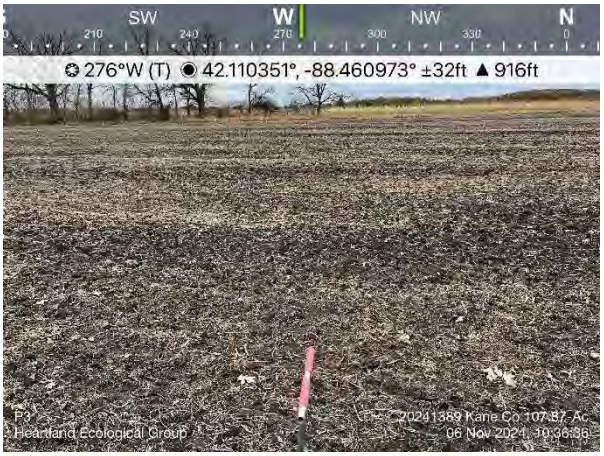

Photo #12 Sample point P3

Photo #13 Sample point P4

Photo #14 Sample point P4

Photo #15 Sample point P4

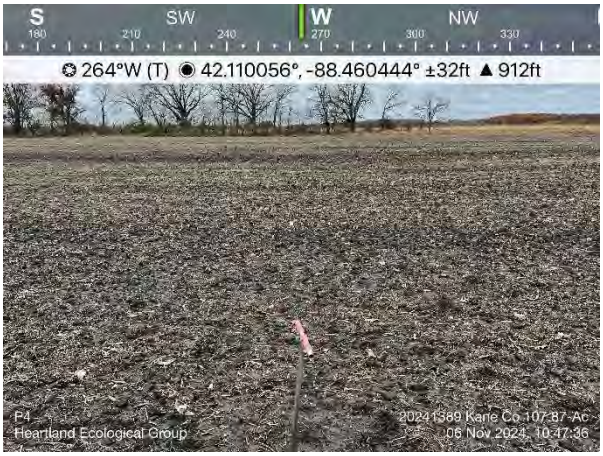

Photo #16 Sample point P4

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

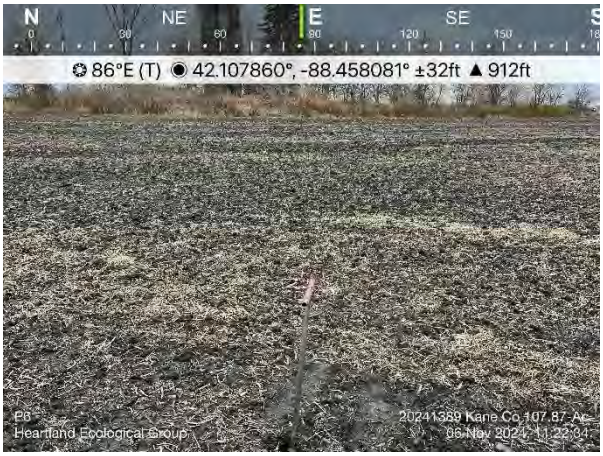

Photo #22 Sample point P6

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

Photo #49 Sample point P13

Photo #50 Sample point P13

Photo #51 Sample point P13

Photo #52 Sample point P13

Photo #53 Sample point P14

Photo #54 Sample point P14

Photo #55 Sample point P14

Photo #56 Sample point P14

Photo #57 Sample point P15

Photo #58 Sample point P15

Photo #59 Sample point P15

Photo #60 Sample point P15

Photo #61 Growing season evidence: Elymus and Cirsium still green

Photo #62 Growing season evidence: Urtica and Bromus still green

Photo #63 Growing season evidence: Daucus and Elymus repens still green

Appendix E | Delineator Qualifications

Heartland
ECOLOGICAL GROUP INC

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); 128th 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); 3rd 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 42nd 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 82nd 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); 47th 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. 70th St. Site, Milwaukee Co., WI (Apr); 6th & 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); 98th 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-I94 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); 112th 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); 184th Ave Bristol Property, Kenosha Co., WI (Oct); 144th 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); 86th 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); 76th & 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); 256th 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 6th 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-90th 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 Freeport 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)

Appendix F | Off-Site Analysis

Heartland ECOLOGICAL GROUP INC

Field data sheet reference (if applicable): _____

TABLE A1

Wetland Hydrology from Aerial Imagery - Recording Form*

Project Name: **Kane Co Route 107.87 Ac Site** *Date:* **10/15/2024** *County:* **Kane**

Investigator: **Eric C. Parker, SPWS** *Legal Description (T, R, S):* **T42N, R7E, Sections 18-19-20**

Summary Table

Date Image Taken*	Image Source	Climate Condition (wet, dry, normal)	Image Interpretation(s) See Offsite Analysis Reference Image figure for outlines of Areas 1-6					
			Area: 1	Area: 2	Area 3	Area 4	Area 5	Area 6
2004-08-06	NAIP	Normal	CS DO	CS DO	CS	NV NSS	SS	SS
2005-03-31	Google Earth™	Normal	SS-	NV NSS	NV NSS	NV NSS	NV NSS	SS
2005-08-06	NAIP	Dry	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS
2006-06-02	Google Earth™	Normal	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS
2006-07-01	NAIP	Normal	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS
2007-06-06	Google Earth™	Normal	NV NSS	NV NSS	NV NSS	NV NSS	SS-	NV NSS
2007-07-07	NAIP	Dry	NV NSS	NV NSS	NV NSS	NV NSS	SS	NV NSS
2007-10-10	Google Earth™	Normal	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS
2008-05-03	Google Earth™	Wet	SS-	SS-	SS-	SS-	SS-	SS-
2009-06-27	Google Earth™	Wet	CS-	DO	CS-	CS-	CS SS -	DO
2009-08-02	NAIP	Normal	CS-	DO	CS-	CS-	SS-	SS CS -
2010-06-23	Google Earth™	Normal	NV NSS	SS CS	CS-	CS-	CS SS-	WS
2010-07-01	NAIP	Normal	NV NSS	SS CS	CS-	CS-	SS-	WS
2011-08-26	NAIP	Wet	NV NSS	CS-	NV NSS	NV NSS	CS-	NV NSS
2011-09-14	Google Earth™	Wet	NV NSS	CS-	NV NSS	NV NSS	CS	NV NSS
2012-06-19	NAIP	Dry	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS
2014-06-13	NAIP	Normal	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS
2015-05-12	Google Earth™	Normal	NV NSS	SS-	NV NSS	SS	NV NSS	SS DO
2015-09-16	NAIP	Wet	CS-	CS-	CS-	CS-	SS CS	NV NSS
2017-04-06	Google Earth™	Normal	SS	SS	SS	SS	SS	SS
2017-09-01	NAIP	Normal	CS-	DO	CS	CS	CS	CS DO
2018-07-06	Google Earth™	Wet	SS	SS SW	SS	SS	SS	SS
2019-09-14	NAIP	Normal	SS	SW	SS SW	SS SW	SS	SS WS
2020-06-07	Google Earth™	Wet	SW SS	SW SS	SW SS	SW SS	SW SS	SW SS
2021-05-28	Google Earth™	Dry	SS-	SS	SS	SS	SS	SS
2021-07-24	Google Earth™	Normal	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS	NV NSS
2021-09-05	NAIP	Normal	CS-	CS-	CS-	CS-	NV NSS	SS
2023-08-16	NAIP	Normal	NV NSS	NV NSS	NV NSS	NV NSS	CS-	NV NSS
Normal Climate Condition			**Area 1**	**Area 2**	**Area 3**	**Area 4**	**Area 5**	**Area 6**
Number			17	17	17	17	17	17
Number with wet signatures			7	10	8	8	9	10
Percent with wet signatures			41%	59%	47%	47%	53%	59%

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: **April 6, 2017 aerial shows tile signatures amidst SS signatures in all 6 areas-potentially meaning these areas are effectively drained, or partially drained.**

* Images that were taken after the 20th of their respective month were evaluated under the following month's table to account for otherwise missing preciitation 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

Heartland ECOLOGICAL GROUP INC

Field data sheet reference (if applicable): _____

Wetland Determination from Aerial Imagery - Recording Form*

Project Name: **Kane Co Route 107.87 Ac Site** *Date:* **10/15/2024** *County:* **Kane**

Investigator: **Eric C. Parker, SPWS** *Legal Description (T, R, S):* **42N, R7E, Sections 18-19-20**

Use the decision matrix below to create Table A2

Hydric Soils Present?[1]	Identified on NWI or WWI?[2]	Percent with Wet Signatures from TABLE A1	Field Verification Required?[3]	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**

[1] 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.

[2] 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.

[3] 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 indicator (geomorphic position).

TABLE A2

Area	Hydric Soils Present?[1]	Identified on NWI or WWI?	Percent with Wet Signatures from TABLE A1	Other Hydrology Indicators Present?[1]	Wetland?
1	Yes	No	41%	Need Field Check	Yes(?)
2	Yes	No	59%	N/A	Yes
3	No	No	47%	Need Field Check	Yes(?)
4	Yes	No	47%	Need Field Check	Yes(?)
5	Yes	No	53%	N/A	Yes
6	Yes	No	59%	N/A	Yes

[1] 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

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2017-09-01
NAIP Aerial Imagery
Kane County Site
Project #20241389
T42N, R7E, S18, S19, S20
T Rutland, Kane Co

2017 NAIP
USDA
LRR: NCNE

Figure Created: 10/15/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2004-08-06
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2004 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
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Appendix: 2005-08-06
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2005 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2006-07-01
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2006 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2007-07-07
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2007 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2009-08-02
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2009 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Heartland
ECOLOGICAL GROUP INC

Appendix: 2010-07-01
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2010 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2012-06-19
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2012 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2014-06-13
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2014 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2015-09-16
NAIP Aerial Imagery

Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2015 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
ECOLOGICAL GROUP INC

Appendix: 2017-09-01
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2017 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
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Appendix: 2019-09-14
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2019 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

Heartland
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Appendix: 2021-09-05
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2021 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024

Study Area (108.64 ac)

0 200 400 Ft

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Appendix: 2023-08-16
NAIP Aerial Imagery
Kane County 107.87-Acre Site
Project #20241389
T42N, R7E, S18, S19, S20
Town of Rutland, Kane Co, IL

2023 NAIP
USDA
LRR: NCNE

Figure Created: 10/16/2024


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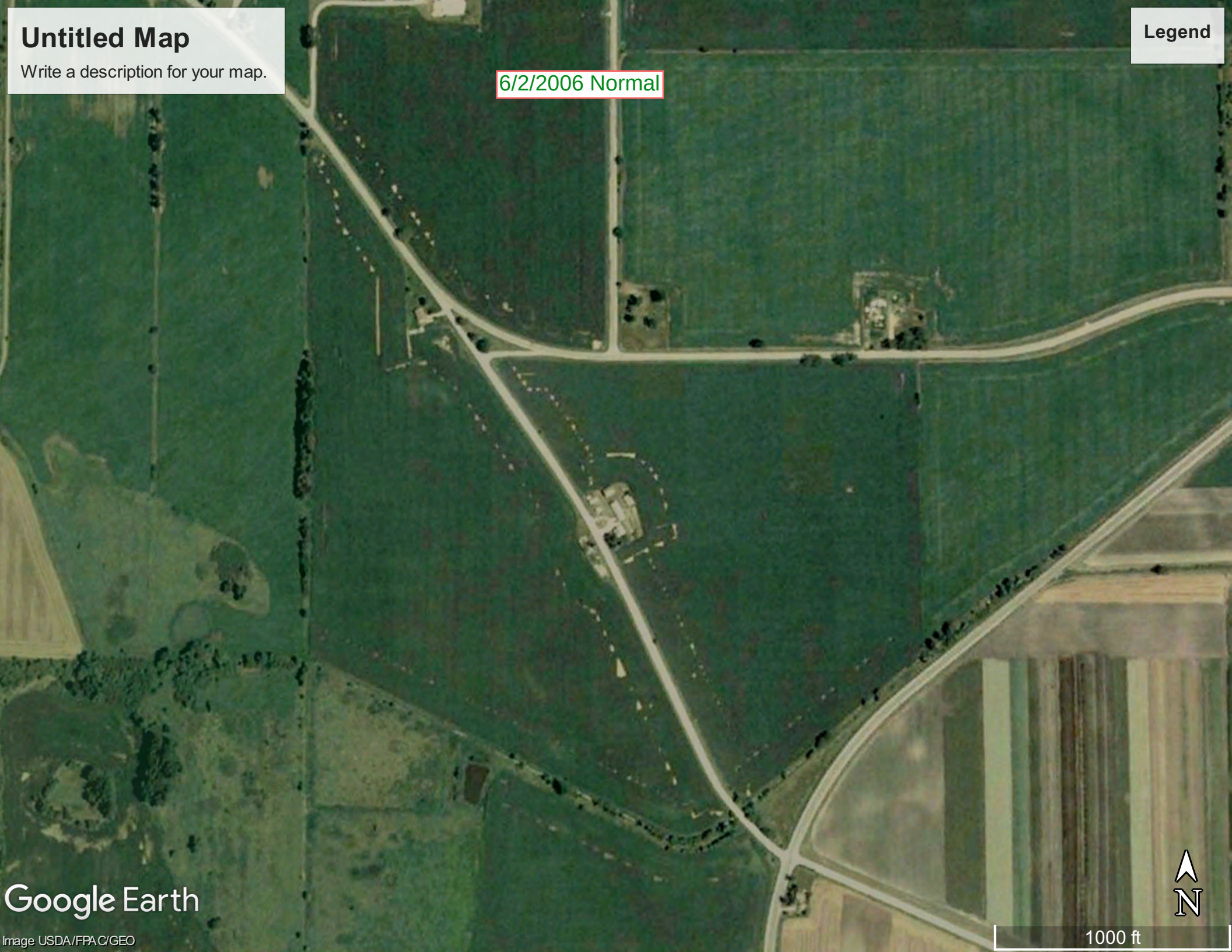
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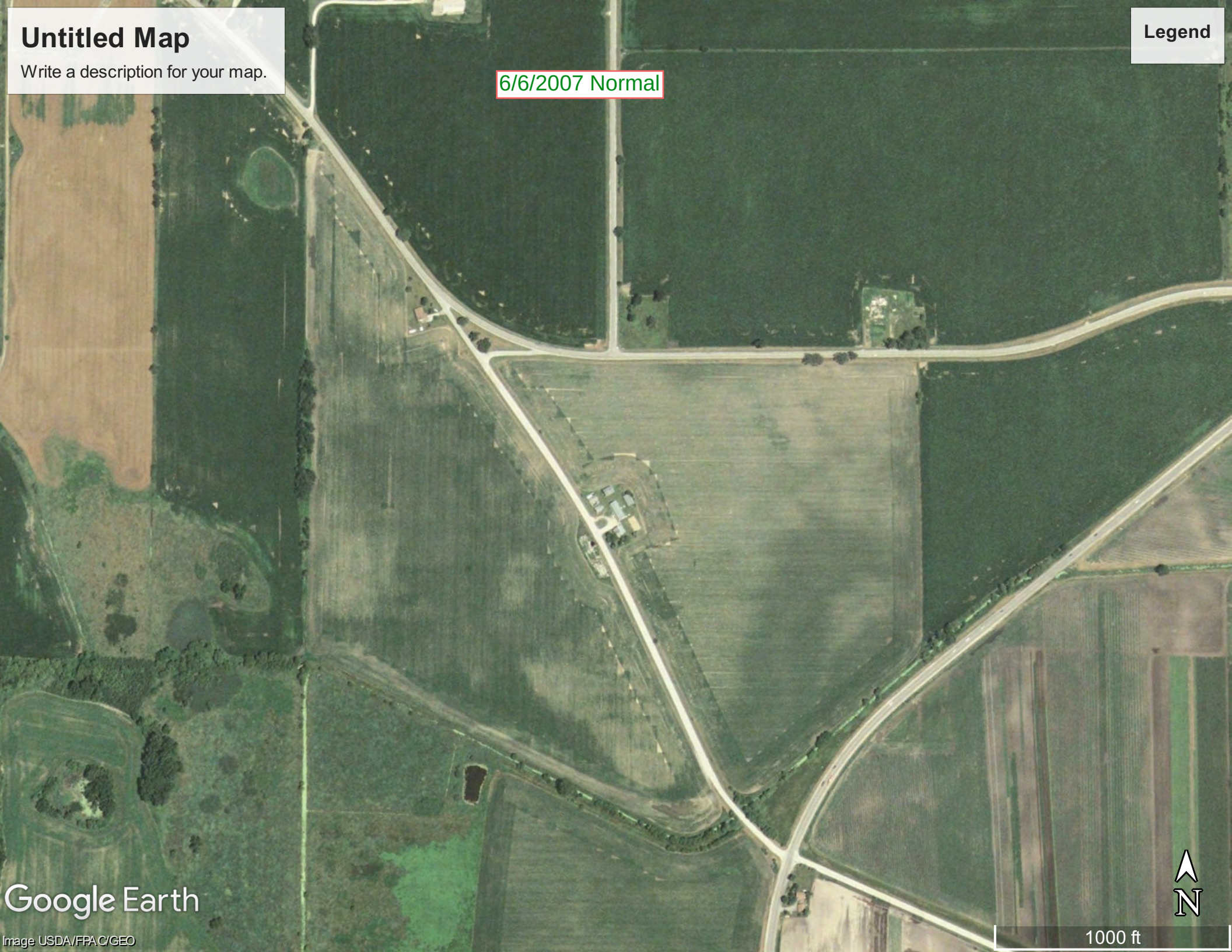
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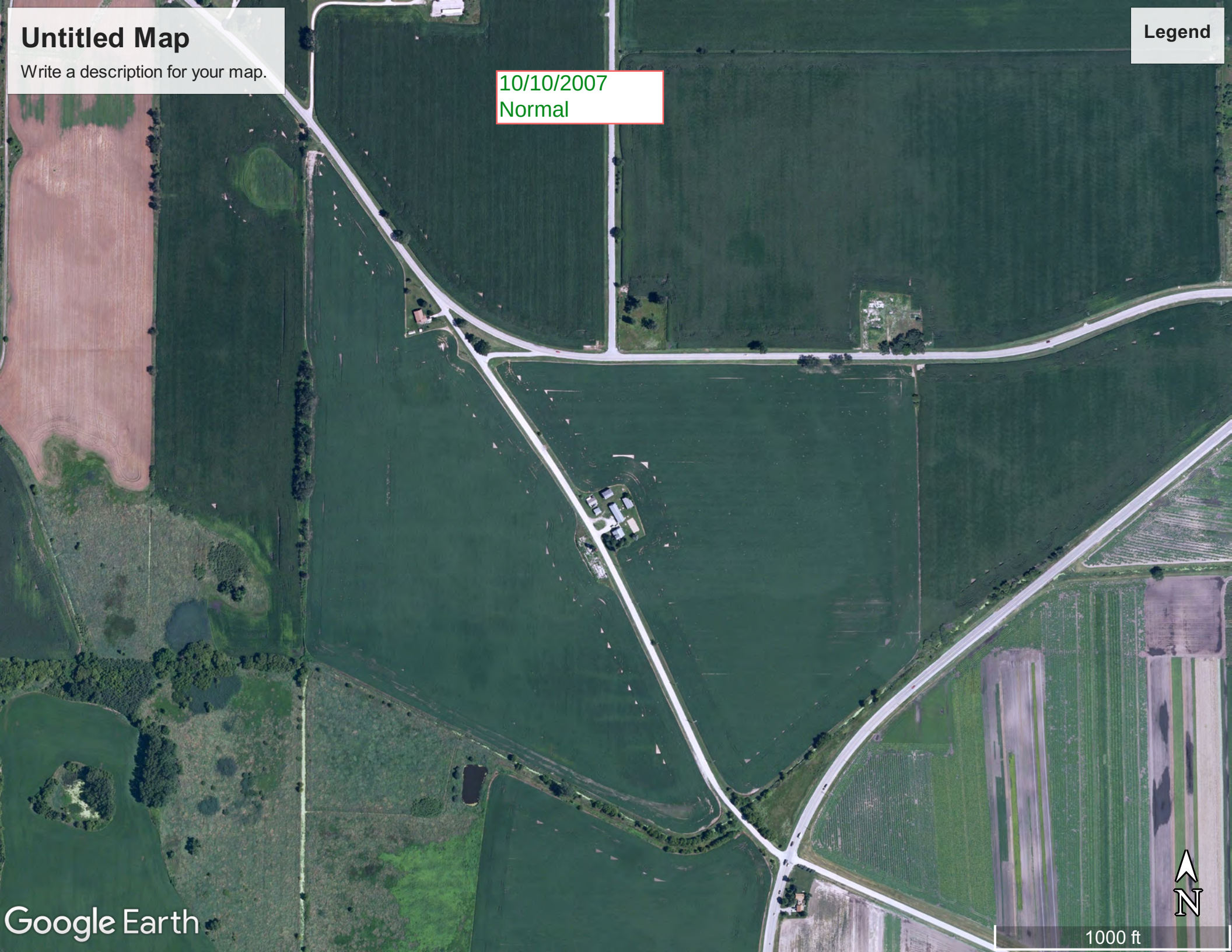
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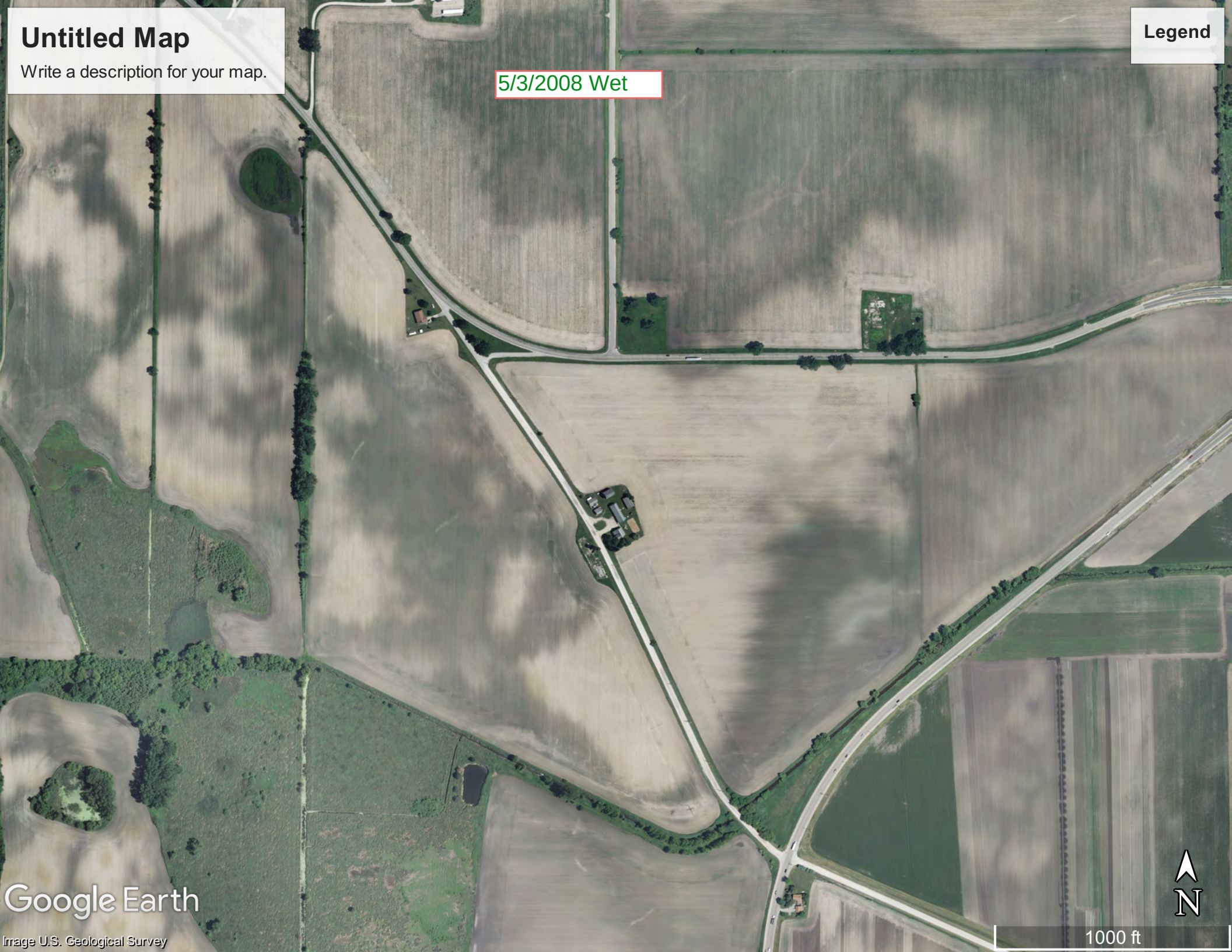
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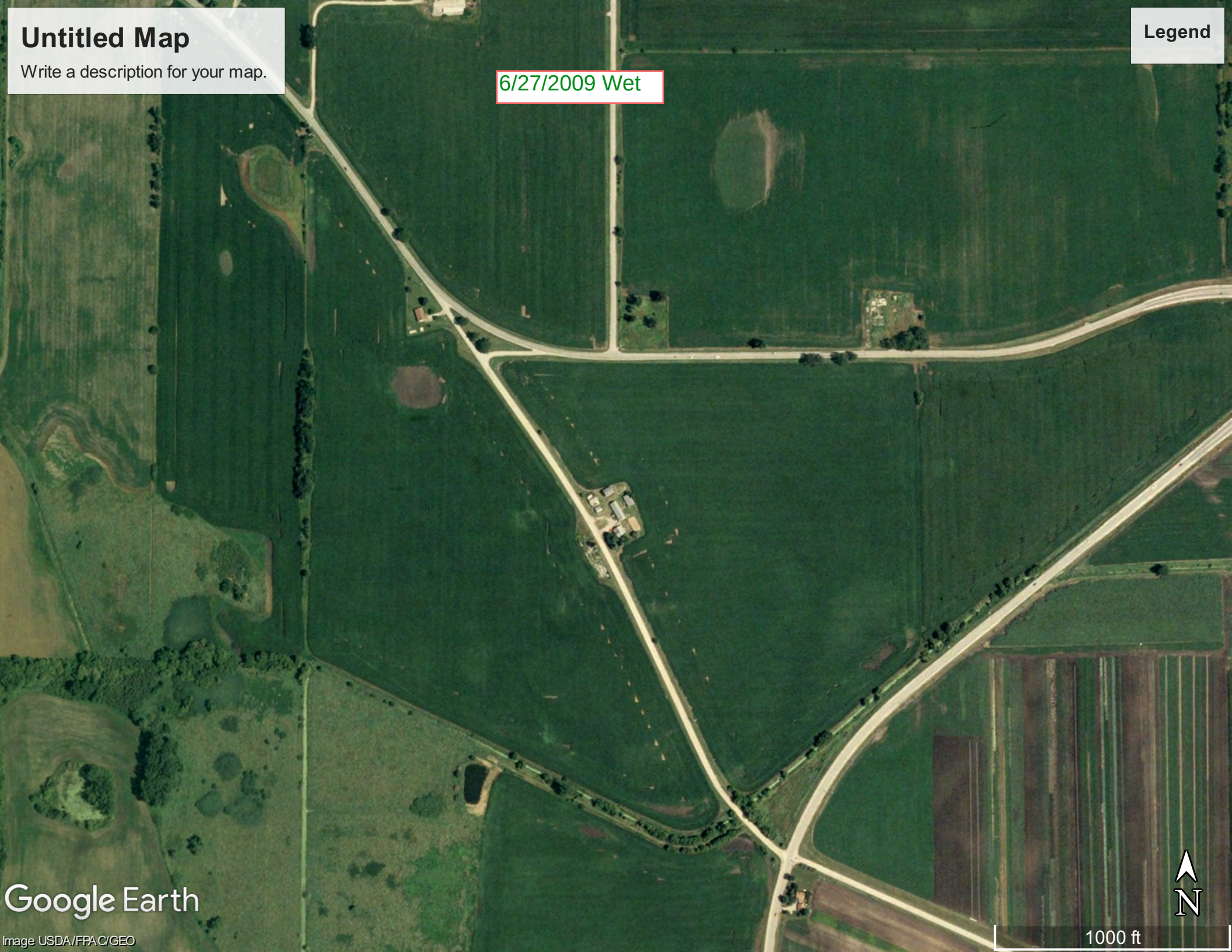
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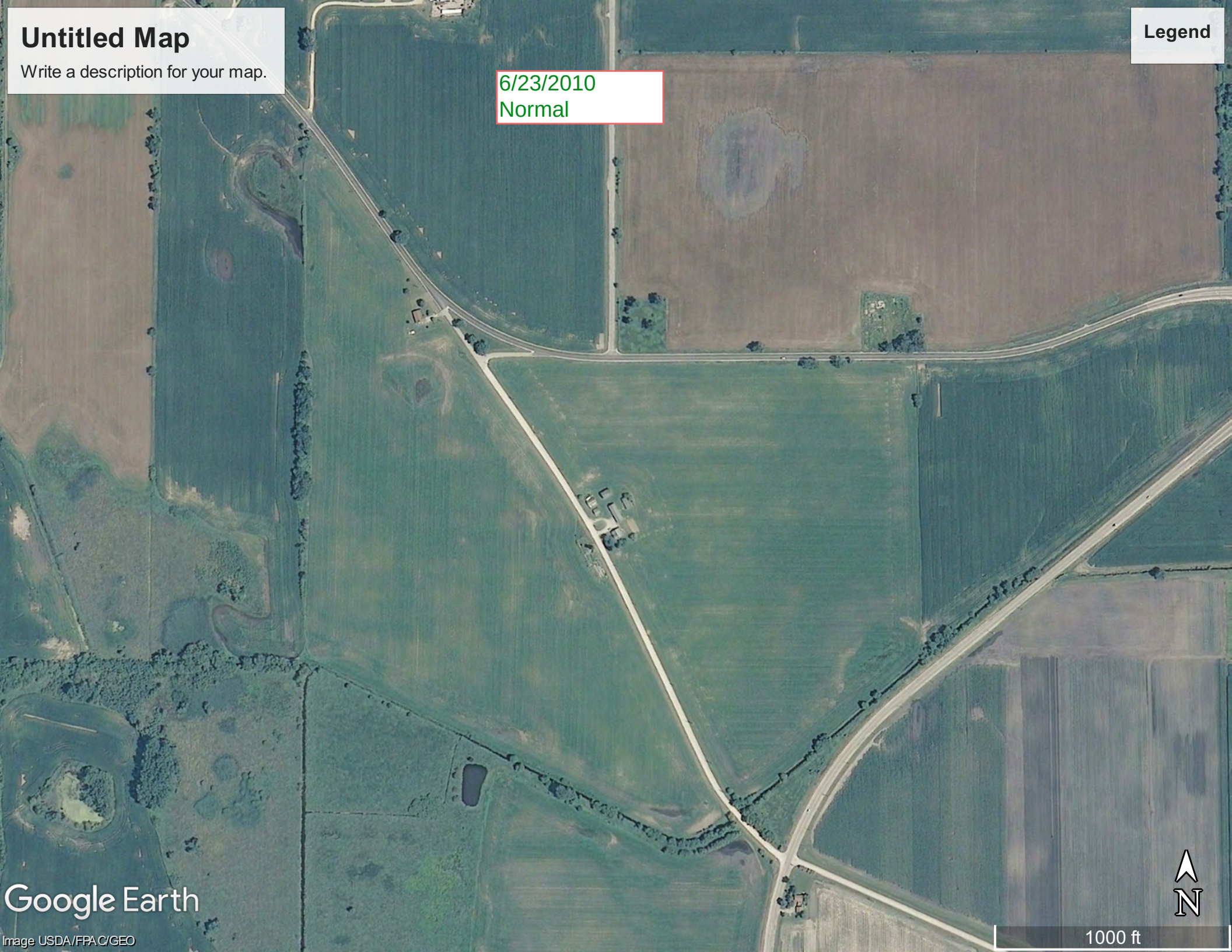
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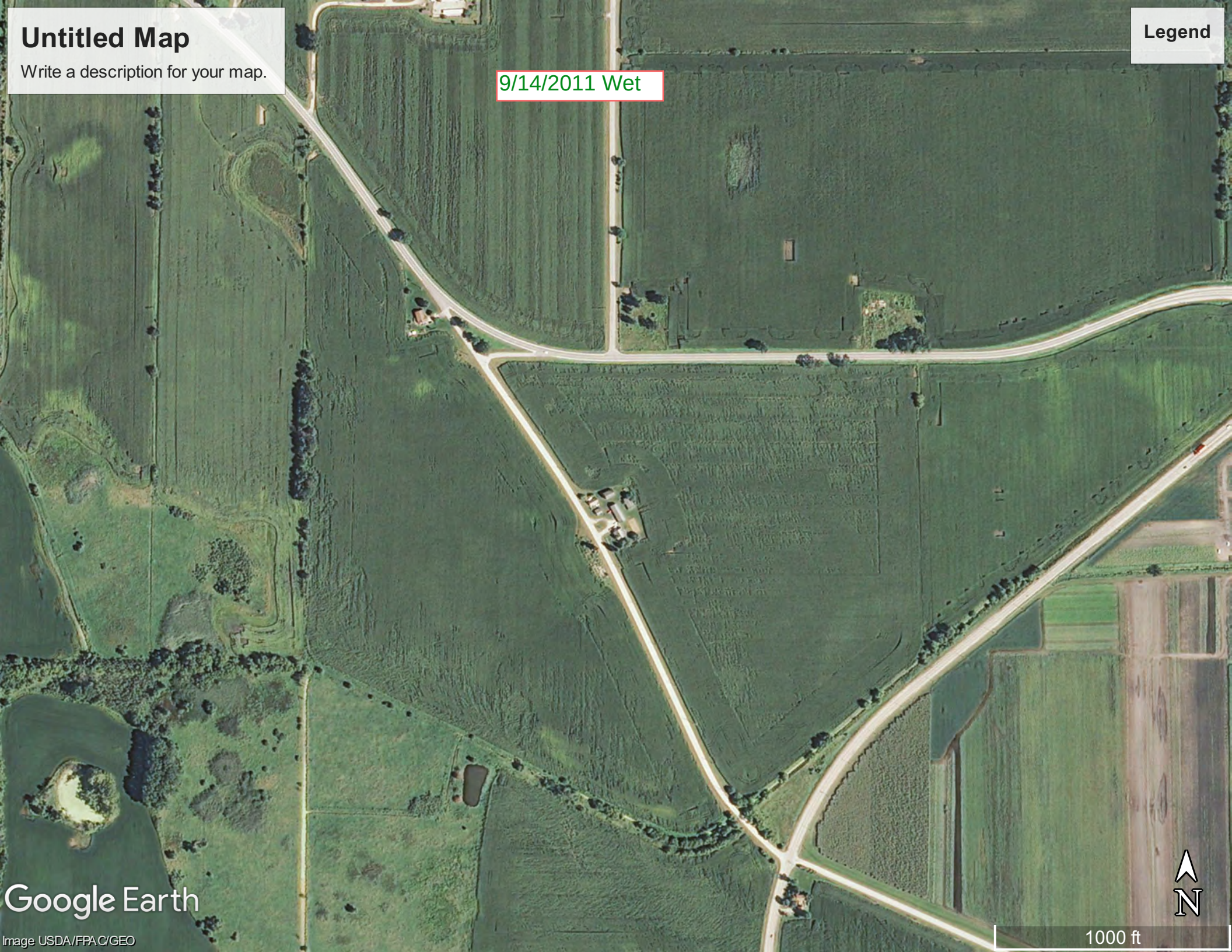
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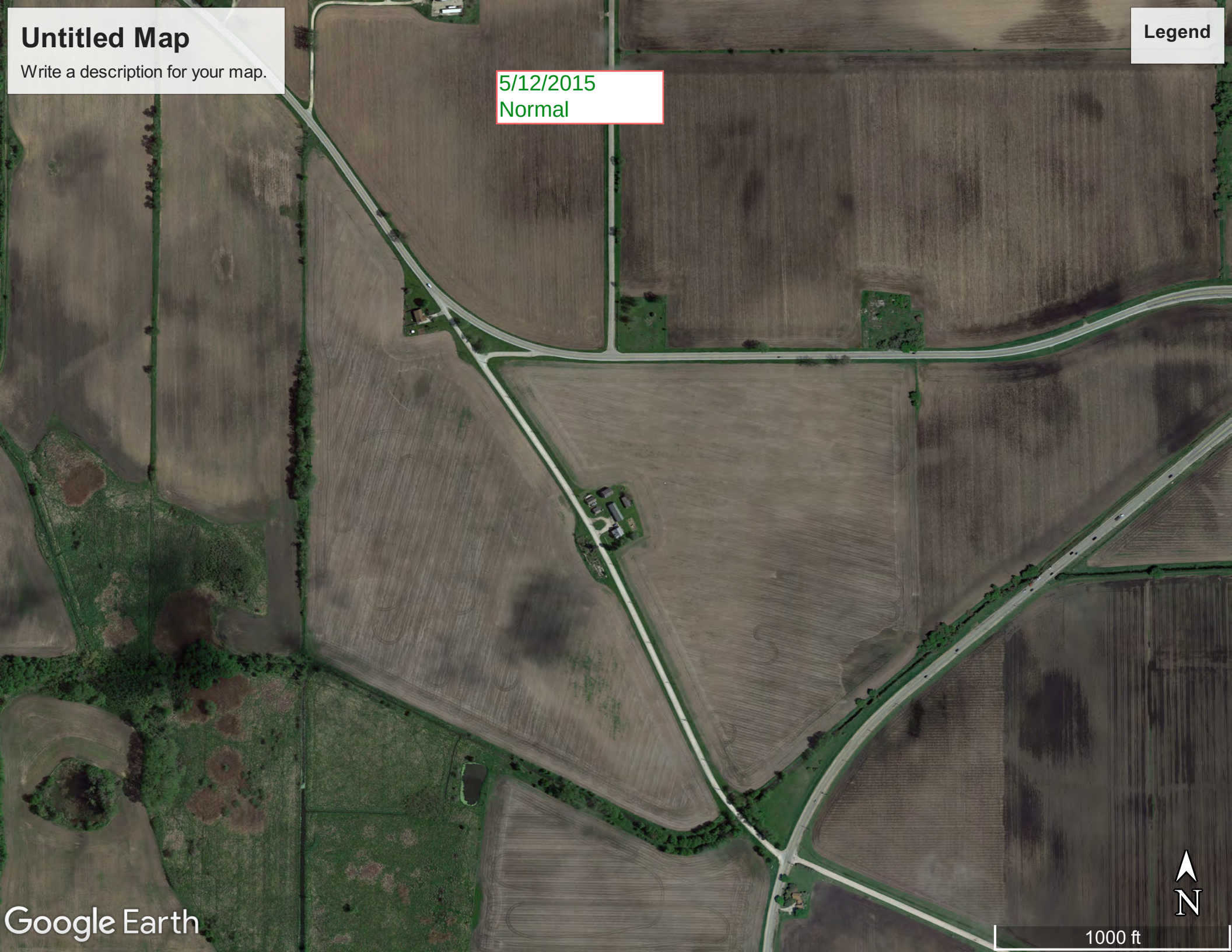
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5/12/2015
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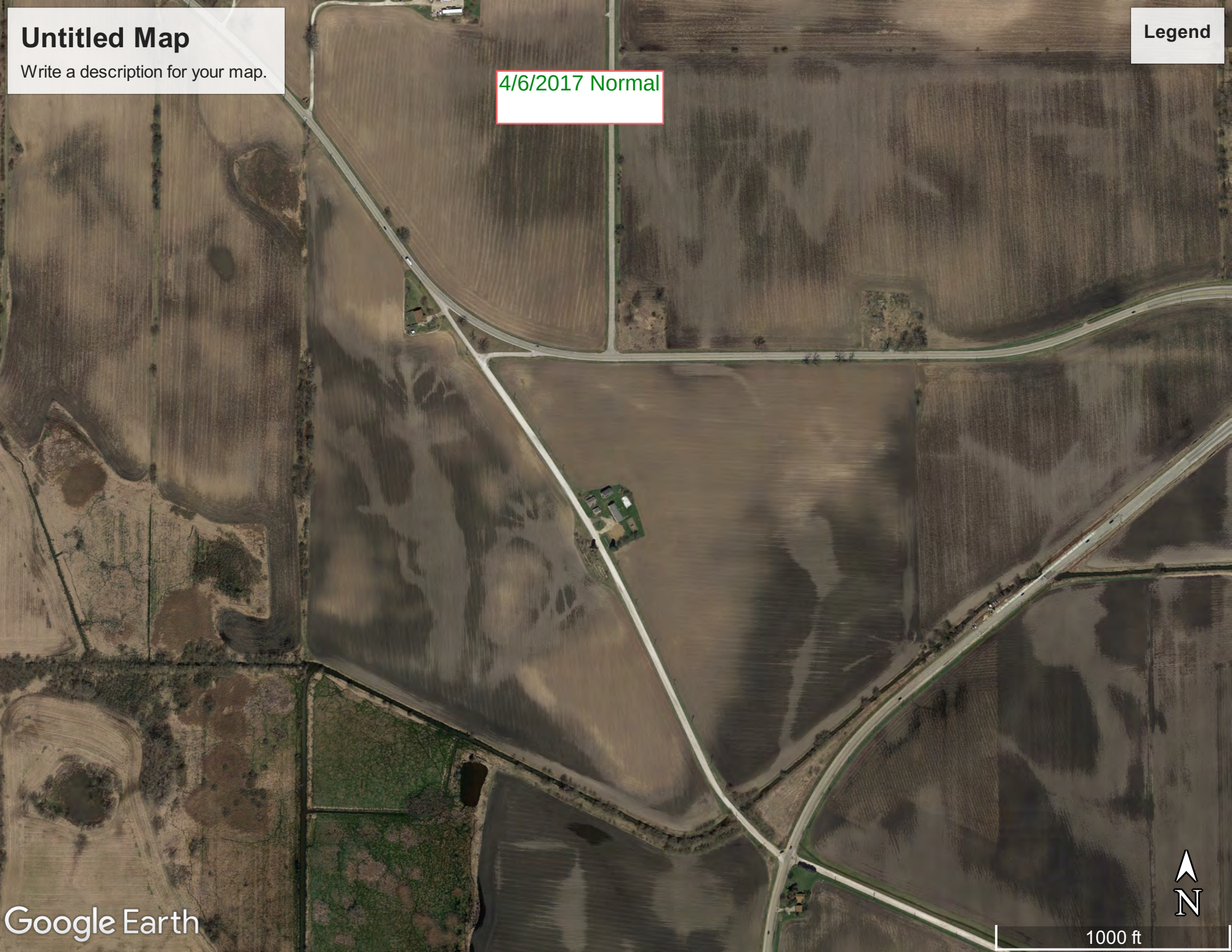
Google Earth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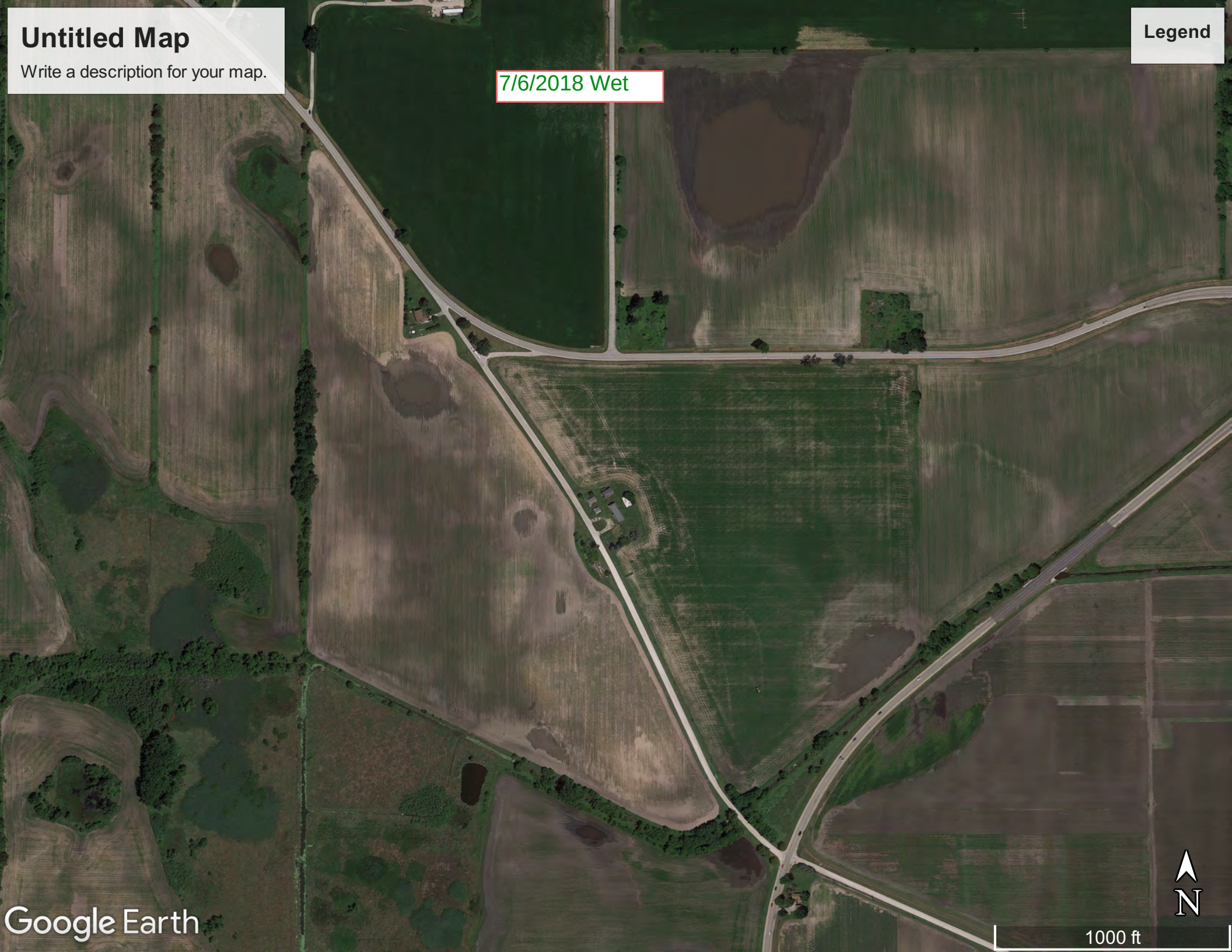
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7/6/2018 Wet
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Untitled Map
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6/7/2020 Wet
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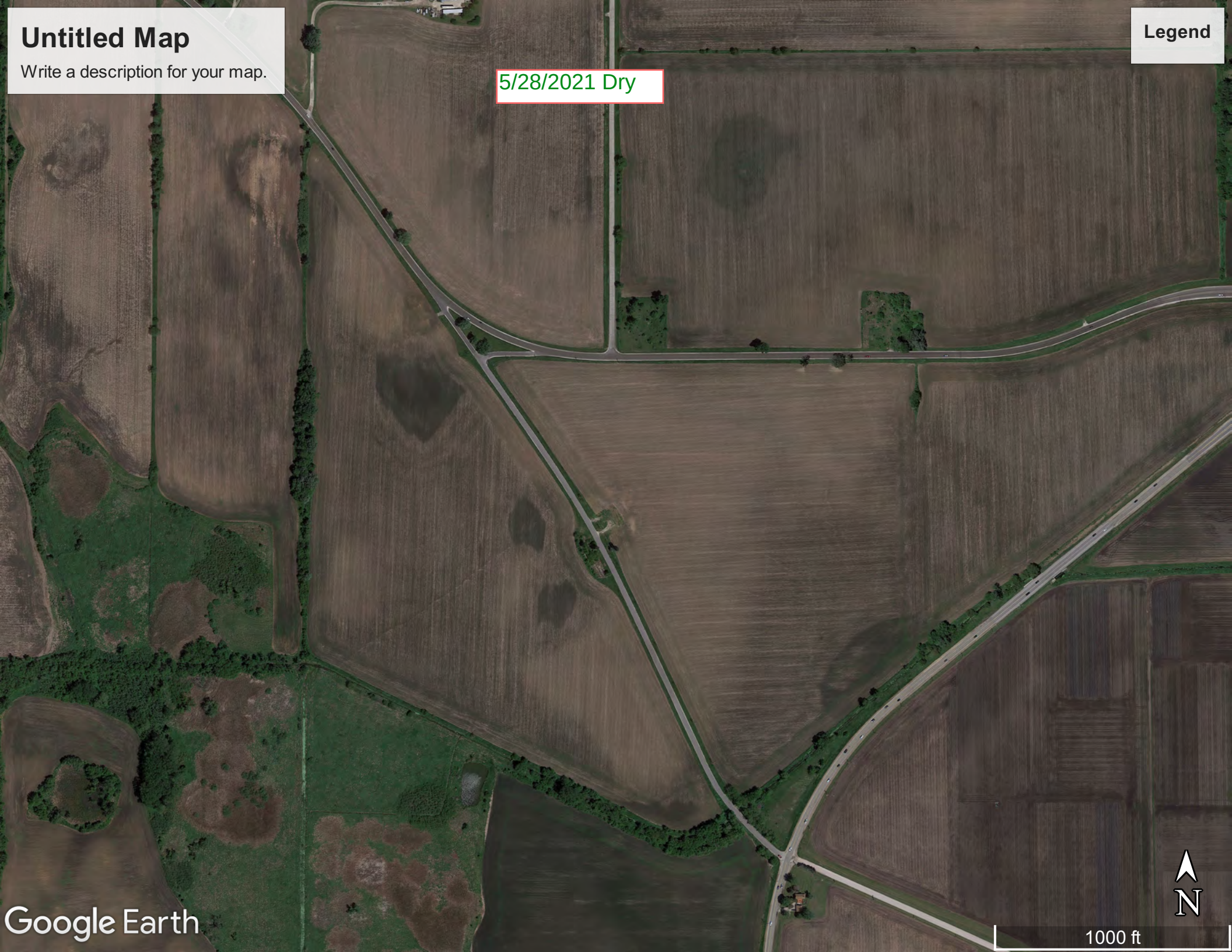
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5/28/2021 Dry
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Google Earth
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Untitled Map
Write a description for your map.
7/24/2021
Normal
Legend
Google Earth
Image © 2024 Maxar Technologies
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1000 ft

April Aerial Imagery

Off-Site Aerial Imagery Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	January	Weighted Precip	Feburary	Weighted Precip	March	Weighted Precip		
31-Mar-05	3.03	3	1.71	4	0.94	3	10	Normal
06-Apr-17	2.83	3	0.90	2	4.94	9	14	Normal
30% chance less than**	1.20		1.00		1.37			
30 Year Average**	1.85		1.83		2.26			
30% chance more than**	2.22		2.23		2.74			

WETS Station: Elgin Water, IL

30-Year Precipitation Data (1994-2023) from NOAA Website

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

May Aerial Imagery

Off-Site Aerial Imagery Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	February	Weighted Precip	March	Weighted Precip	April	Weighted Precip		
5/3/08	3.92	3	1.89	4	4.53	9	16	Wet
5/12/15	1.45	2	1.28	2	3.14	6	10	Normal
30% chance less than**	1.00		1.37		2.80			
30 Year Average**	1.83		2.26		3.83			
30% chance more than**	2.23		2.74		4.51			

WETS Station: Elgin Water, IL
30-Year Precipitation Data (1994-2023) from NOAA Website
http://agacis.rcc-acis.org/

June Aerial Imagery

Off-Site Aerial Imagery Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	March	Weighted Precip	April	Weighted Precip	May	Weighted Precip		
2-Jun-06	3.64	3	3.41	4	4.76	6	13	Normal
6-Jun-07	3.40	3	3.91	4	2.52	3	10	Normal
19-Jun-12	1.82	2	3.13	4	1.57	3	9	Dry
13-Jun-14	1.31	1	2.72	2	5.46	9	12	Normal
7-Jun-20	3.69	3	5.06	6	8.90	9	18	Wet
28-May-21	1.28	1	1.13	2	1.76	3	6	Dry
30% chance less than**	1.37		2.80		3.36			
30 Year Average**	2.26		3.83		4.44			
30% chance more than**	2.74		4.51		5.18			

WETS Station: Elgin Water, IL
30-Year Precipitation Data (1994-2023) from NOAA Website
http://agacis.rcc-acis.org/

July Aerial Imagery

Off-Site Aerial Imagery Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	April	Weighted Precip	May	Weighted Precip	June	Weighted Precip		
07/10/05	2.62	1	2.51	2	0.46	3	6	Dry
07/01/06	3.41	2	4.76	4	4.39	6	12	Normal
07/07/07	3.91	2	2.52	2	2.93	3	7	Dry
06/27/09	5.31	3	4.18	4	6.17	9	16	Wet
06/23/10	2.92	2	6.12	6	4.21	6	14	Normal
07/01/10	2.92	2	6.12	6	4.21	6	14	Normal
07/02/17	4.57	3	5.48	6	5.45	9	18	Wet
07/06/18	2.06	1	9.79	6	9.21	9	16	Wet
30% chance less than**	2.80		3.36		3.13			
30 Year Average**	3.83		4.44		4.46			
30% chance more than**	4.51		5.18		5.29			

WETS Station: Elgin Water, IL
30-Year Precipitation Data (1994-2023) from NOAA Website
http://agacis.rcc-acis.org/

August Aerial Imagery

Off-Site Aerial Imagery Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	May	Weighted Precip	June	Weighted Precip	July	Weighted Precip		
08/06/04	8.60	3	4.11	4	2.51	3	10	Normal
08/06/05	2.51	1	0.46	2	1.39	3	6	Dry
07/21/07	2.52	1	2.93	2	5.91	9	12	Normal
08/02/09	4.18	2	6.17	6	2.44	3	11	Normal
07/24/21	1.76	1	5.68	6	1.09	3	10	Normal
08/16/23	1.46	1	2.46	2	8.43	9	12	Normal
30% chance less than**	3.36		3.13		2.69			
30 Year Average**	4.44		4.46		4.13			
30% chance more than**	5.18		5.29		4.96			

WETS Station: Elgin Water, IL
30-Year Precipitation Data (1994-2023) from NOAA Website
http://agacis.rcc-acis.org/

September Aerial Imagery

Off-Site Aerial Imagery Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	June	Weighted Precip	July	Weighted Precip	August	Weighted Precip		
8/26/11	4.45	2	5.76	6	6.27	9	17	**Wet**
9/14/11	4.45	2	5.76	6	6.27	9	17	**Wet**
9/16/15	8.35	3	5.74	6	3.10	6	15	**Wet**
9/1/17	5.45	3	9.69	6	2.14	3	12	**Normal**
9/14/19	3.74	2	3.30	4	3.23	6	12	**Normal**
9/5/21	5.68	3	1.09	2	3.94	6	11	**Normal**
30% chance less than**	3.13		2.69		2.96			
30 Year Average**	4.46		4.13		4.51			
30% chance more than**	5.29		4.96		5.41			

WETS Station: Elgin Water, IL
30-Year Precipitation Data (1994-2023) from NOAA Website
http://agacis.rcc-acis.org/

October Aerial Imagery

Off-Site Aerial Imagery Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	July	Weighted Precip	August	Weighted Precip	September	Weighted Precip		
10-Oct-07	5.91	3	15.69	6	0.77	3	12	Normal
28-Sep-21	1.09	1	3.94	4	1.48	3	8	Dry
30% chance less than**	2.69		2.96		1.98			
30 Year Average**	4.13		4.51		3.44			
30% chance more than**	4.96		5.41		4.19			

WETS Station: Elgin Water, IL
30-Year Precipitation Data (1994-2023) from NOAA Website
http://agacis.rcc-acis.org/

WETS Table

WETS Station: ELGIN WATER, IL								
Requested years: 1994 - 2023								
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall
Jan	30.1	14.2	22.1	1.85	1.20	2.22	5	10.4
Feb	33.8	16.1	24.9	1.83	1.00	2.23	5	8.6
Mar	46.3	26.5	36.4	2.26	1.37	2.74	5	3.1
Apr	58.6	36.8	47.7	3.83	2.80	4.51	8	0.7
May	70.1	48.2	59.1	5.16	3.54	6.14	9	0.0
Jun	80.3	58.6	69.5	4.46	3.13	5.29	7	0.0
Jul	84.2	63.4	73.8	4.13	2.69	4.96	6	0.0
Aug	82.4	61.6	72.0	4.51	2.96	5.41	6	0.0
Sep	76.2	53.3	64.8	3.44	1.98	4.19	6	0.0
Oct	62.9	41.5	52.2	3.37	2.06	4.09	6	0.0
Nov	48.0	30.2	39.1	2.36	1.46	2.86	5	1.4
Dec	35.8	20.5	28.2	2.22	1.57	2.64	5	7.0
Annual:					36.05	43.99		
Average	59.1	39.2	49.1	-	-	-	-	-
Total	-	-	-	39.42			73	31.3

GROWING SEASON DATES			
Years with missing data:	24 deg = 1	28 deg = 1	32 deg = 0
Years with no occurrence:	24 deg = 0	28 deg = 0	32 deg = 0
Data years used:	24 deg = 29	28 deg = 29	32 deg = 30
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent *	4/1 to 11/12: 225 days	4/14 to 10/27: 196 days	4/28 to 10/18: 173 days
70 percent *	3/28 to 11/16: 233 days	4/9 to 11/1: 206 days	4/25 to 10/22: 180 days
* Percent chance of the growing season occurring between the Beginning and Ending dates.			

STATS TABLE - total precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1983			M0.00	6.76	3.47	2.10	3.55	3.26	6.19	M3.74	5.19	M1.64	35.90
1984	M0.51	1.42	M0.27	M4.49								M1.83	8.52
1985		M1.37	3.74	1.45	3.74	3.08	5.70	4.07	2.54	3.75	8.42	M0.76	38.62
1986	M0.31	M1.72	M0.20	2.30	4.98	4.24	4.41	1.67	7.08		1.36	0.97	29.24
1987		0.04	M1.42	3.51	M4.52	M1.68	3.52	11.36	2.54	1.18	M4.04	M2.98	36.79
1988	2.16	M1.02	M1.94	3.18	1.15	1.36	2.57	5.69	2.31	2.65	4.20	M3.01	31.24
1989	M0.50	M0.84	0.66	1.01		4.38	6.65	M6.26	4.39	1.06	2.31	M0.29	28.35
1990	M2.42	1.81	2.31	2.01	4.70	4.98	2.82	6.44	1.02	3.31	4.34	1.69	37.85
1991	M0.73	0.24	2.28	4.13	5.02	1.59		2.68	3.	5.	3.61	1.54	30.

									11	84			77
1992	0.92	1.41	M3.81	2.75	0.47	1.02	5.42	2.67	4.02	1.13	5.69	2.92	32.23
1993	3.38	1.08	2.53	7.16	2.07	10.40	5.32	3.30	3.44	1.49	1.97	1.69	43.83
1994	M1.41	M1.35	1.11	1.84	1.47	4.19	3.68	5.45	2.00	1.16	6.20	1.18	31.04
1995	M3.27	0.08	2.40	5.82	5.35	1.71	4.62	5.18	1.90	5.11	4.14	M0.65	40.23
1996	M1.10	1.02	0.67	2.43	8.70	5.51	3.82	5.68	2.27	2.02	M1.37	1.71	36.30
1997	M0.60	M5.62	2.04	1.64	5.57	2.80	1.52	M4.73	1.98	2.26	M1.33	M1.29	31.38
1998	3.64	1.56	2.17	5.07	3.81	5.27	1.82	4.46	3.11	6.27	1.94	1.80	40.92
1999	M3.04	1.44	M0.23	8.53	3.38	M6.51	3.68	1.80	5.01	1.31	0.63	2.30	37.86
2000	M1.03	M0.91	1.60	4.36	4.50	6.16	4.42	3.22	5.71	1.74	4.65	2.54	40.84
2001	1.43	2.73	1.18	3.42	4.24	3.86	1.19	4.13	6.00	7.53	1.93	1.49	39.13
2002	1.51	M1.26	2.24	3.66	4.89	5.56	1.54	10.21	1.89	1.92	0.93	1.20	36.81
2003	0.37	0.20	1.49	2.35	8.46	1.58	3.53	2.07	1.80	1.92	5.46	2.85	32.08
2004	0.68	0.87	4.97	1.73	8.60	4.11	2.51	3.98	0.72	2.66	3.09	2.48	36.40
2005	M3.03	1.71	0.94	2.62	2.51	0.46	1.39	3.71	2.01	0.78	2.71	1.00	22.87
2006	3.12	1.29	3.64	3.41	4.76	4.39	3.75	3.30	4.28	4.46	2.78	2.97	42.15
2007	1.75	1.89	3.40	3.91	2.52	2.93	5.91	15.69	0.77	3.28	1.01	3.20	46.26
2008	1.92	3.92	1.89	4.53	3.84	4.45	4.31	3.74	11.48	2.41	1.17	5.22	48.88
2009	1.17	2.45	5.08	5.31	4.18	6.17	2.44	6.57	0.70	5.85	1.69	3.78	45.39
2010	1.20	1.29	M0.29	M2.92	6.12	4.21	8.98	2.84	4.05	M0.58	M1.21	M1.43	35.12
2011	M1.21	3.27	2.73	M5.62	8.22	M4.45	M5.76	M6.27	M4.49	M1.76	M4.14	M3.08	51.00
2012	1.42	M0.76	1.82	3.13	1.57	2.66	2.75	2.81	2.09	4.03	0.69	2.77	26.50
2013	3.51	3.01	2.19	7.42	2.96	3.86	3.00	2.70	4.02	1.79	3.17	M1.14	38.77
2014	2.18	1.81	1.31	2.72	M5.46	5.89	4.02	6.77	3.30	2.97	1.39	1.19	39.01
2015	1.56	1.45	1.28	3.14	5.18	M8.35	5.74	3.10	5.48	1.39	4.81	M5.50	46.98
2016	M0.34	1.14	3.30	3.04	6.49	3.86	4.59	3.58	2.24	3.58	2.38	1.85	36.39
2017	M2.83	0.90	4.94	4.57	5.48	5.45	9.69	2.14	0.58	7.78	1.92	0.90	47.18
2018	1.28	4.67	1.51	2.06	9.79	9.21	2.77	5.81	3.84	5.44	M3.20	2.06	51.64
2019	2.97	M3.41	2.32	4.69	8.76	3.74	3.30	3.23	8.89	5.90	1.95	2.02	51.18
2020	2.76	0.68	3.69	5.06	8.90	5.44	4.21	0.70	5.47	3.42	M2.11	M2.01	44.45
2021	1.78	1.07	1.28	1.13	1.76	5.68	1.09	3.94	1.48	M7.02	0.83	M2.36	29.42
2022	M0.62	M2.30	3.28	M3.67	5.73	2.74	9.30	5.76	2.43	M1.81	1.01	2.17	40.82
2023	2.67	4.20	2.82	4.24	1.46	2.46	8.43	1.66	3.27	3.07	1.04	2.60	37.92
2024	3.49	M0.93	M1.73										6.15

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: 2024-03-14