



Dave Scheffler

Non-Wetland Determination Report

3128, 3130, and 3132 Sunnyside Street Stoughton, WI 53589

PRJ109314 | June 23, 2023

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Acronyms and Abbreviations

AOI	Area of Interest
DP	Data Point
FAC	Facultative Indicator Species
FACU	Facultative Upland Indicator Species
FACW	Facultative Wetland Indicator Species
GPS	Global Positioning System
NRCS	Natural Resources Conservation Service
NTCHS	National Technical Committee for Hydric Soils
NWI	National Wetland Inventory
OBL	Obligate Wetland Indicator Species
PI	Prevalence Index
PP	Photo-point
Regional Supplement	Regional Supplement to the Corps of Engineers Wetland
	Delineation Manual: Northcentral/Northeast Region (Version 2.0)
RES	Resource Environmental Solutions, LLC
UPL	Upland Indicator Species
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
WWI	Wisconsin Wetland Inventory

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Introduction

Resource Environmental Solutions, LLC (RES) staff conducted a wetland delineation at 3128, 3130, and 3132 Sunnyside Street in the City of Stoughton, Dane County, Wisconsin (Appendix A, Figure 1). The approximately 0.6-acre Area of Interest (AOI) is in the southwest ¹/₄ of Section 18, Township 06 North, Range 11 East and consists of three residential lots adjacent to a large wetland complex owned by Dane County to the north and Lake Kegonsa to the south.

This report was prepared based on RES's understanding and interpretation of the wetland delineation methods described in the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual (Environmental Laboratory 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral/Northeast Region (Version 2.0) (hereafter, Regional Supplement) (USACE 2012), and Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and the Wisconsin Department of Natural Resources (USACE 2015).

The objective of this wetland delineation is to provide the spatial boundary of wetlands, if present, within the AOI. RES Ecologist, Matt Parsons, and RES intern, Jack Krebs, conducted the wetland delineation on June 1, 2023. Mr. Parsons is an assured delineator and was lead investigator.

Regulatory Definitions

Wetlands

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Methods

Desktop Analysis and Background Information Review

Several sources of information were reviewed to evaluate the property and identify potential wetland soil map units and potential wetlands onsite. The general topography of the site was reviewed using an online one-foot topographic map (Figure 2). Soil types were identified using the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey for Dane County, Wisconsin (Figure 3). Potential wetlands were identified using the Wisconsin Wetlands Inventory (WWI) (Figure 4). Maps can only be used to establish the probability and approximate location of wetlands on the site; therefore, the USACE does not accept the use of these maps to make final wetland determinations. Final wetland determinations were made with onsite observations and fieldwork. Prior to the fieldwork, background information was reviewed to establish the probability and approximate location of wetlands on the site. The following maps were reviewed offsite or onsite as part of the wetland determination:

- <u>Dane County Topographic Map</u> The topographic map (Figure 2) shows the general elevations of the site. The site is flat with elevations that range from 845 to 846 feet.
- <u>Soil Survey Map</u> The NRCS Web Soil Survey Map (Figure 3) identifies two soil map units within the site boundaries: Cut and fill land (Cu) and Houghton muck (Ho). Data associated with each soil map unit are presented in Table 1.
- <u>WWI Map</u> the WWI map of the area (Figure 4) indicates that one wet soil, palustrine, broad-leaved,

deciduous, forested wetland (S3K) is present just outside the northeastern AOI boundary.

Table 1. Soils Data					
Soil Map Unit Symbol and Name	% of AOI	Drainage Classification*	Major/Minor Components	Map Unit % Composition	Hydric Soil Rating
Cu – Cut and fill land	90%	Moderately well drained	Cut and fill land	100%	No
Ho – Houghton muck	10%	Very poorly drained	Houghton	100%	Yes

* Pertains to major component soil.

All figures are presented in Appendix A.

Site Investigation

On June 1, 2023, RES searched for wetlands contained within the 0.6-acre AOI; however, wetland conditions were absent and no wetlands were delineated. An offsite wetland is present immediately northeast of the northeast property boundary (Figure 5). The boundary of this wetland was surveyed using a Global Positioning System (GPS) receiver where the wetland nears the property boundary. However, because the wetland was offsite, no soil pits were excavated and no data points were established in the wetland.

Three (3) soil test pits that were representative of the AOI were excavated and investigated for evidence of wetland conditions (Figure 5). At each soil pit a Northcentral/Northeast Region wetland delineation data form was prepared and a determination was made as to whether each was in a wetland or upland based on the three criteria: vegetation, soils, and hydrology.

Wetlands

The Regional Supplement was used to provide technical guidance and procedures for identifying and delineating wetlands. The three essential characteristics of a wetland are hydrophytic vegetation, wetland hydrology, and hydric soils. All three characteristics must be present to be considered wetland.

Vegetation: The principal hydrophytic vegetation criteria to be met are when all dominant species across all strata are rated OBL and/or FACW based on visual assessment (rapid test) or when greater than 50% of the dominant plant species are hydrophytes (dominance test) (USACE 2020). The indicator status of plant species is expressed in terms of the estimated probabilities of that species occurring in wetland conditions within a given region. Hydrophytes include all plants classified as "FAC", "FACW" or "OBL". If the plant community failed the dominance test but indicators of hydric soils and wetland hydrology were present, the prevalence index (PI) was calculated. The PI is a weighted average wetland indicator status of all species in a plot. Absolute percent cover for each species is weighted based on the species indicator status (OBL = 1, FACW = 2, FAC = 3, FACU = 4, UPL = 5). PI is the sum of the weighted absolute cover values divided by the sum of the absolute percent cover values. If PI is 3.0 or less, the plant community is considered hydrophytic.

Vegetation in several locations was found to be significantly disturbed due to the presence of a managed plant community (manicured turf). Since the lawn is not maintained intensively (e.g., regular weed control, overseeding, etc.) the plant communities were considered significantly disturbed but naturalized and not problematic.

2. **Hydrology:** Wetland hydrology is present if an area contains one or more "primary indicators" and/or two or more "secondary indicators" for USACE jurisdictional wetlands and isolated wetlands.

Primary indicators include either the direct presence of water as inundation or saturation within the upper 12 inches of the soil profile, or direct evidence of recent inundation, such as water marks, drift lines, sediment deposits, or drainage patterns. Secondary indicators include surface soil cracks, geomorphic position that could collect or concentrate water, and positive FAC-Neutral Test (i.e., dominant FACW and OBL species account for more than 50% of the total number of dominant species across strata, excluding FAC-rated dominants).

3. **Soils:** The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (NRCS 2018). Nearly all hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation for more than a few days. Saturation or inundation, when combined with microbial activity in the soil, causes the depletion of oxygen. This anaerobic condition promotes certain biogeochemical processes, such as the accumulation of organic matter and the reduction, translocation, and accumulation of iron and other reducible elements. These processes result in distinctive characteristics that persist in the soil during both wet and dry periods, making them particularly useful for identifying hydric soils in the field.

Some of the field indicators include dark color (low chroma), redoximorphic features, gleying, and/or the presence of a sulfurous odor. Although USDA soil maps are useful for soil identification, they should be used only as general guides. Soils are evaluated directly by excavating a test pit at each of the data point locations. In this report, soil colors are described using the Munsell notation system.

Soils consisted of historic fill at several data point locations and were considered significantly disturbed at these locations. This was considered the normal circumstance since this fill was likely placed decades ago and soils could be reliably described and interpreted.

Routine Wetland Delineation Data Forms

Completed Routine Wetland Delineation Data Forms – Northcentral/Northeast Region for this delineation are in Appendix B. These forms are the written documentation of how the data points do or do not meet all three of the wetland criteria. Three (3) data points (DP01-DP03) were selected to document the conditions of the site.

Site Photographs

Photographs of the site are presented in Appendix C. These photographs provide visual documentation of site conditions at the time of the June inspection. The photographs are intended to provide representative visual documentation of data points and other special features found on or near the site investigated. Photos were taken at all three data points and at four photo-documentation point (PP) locations.

Results

General Site Conditions

The site consists of three residential lots adjacent to a large wetland complex owned by Dane County to the north and Lake Kegonsa to the south. This area was filled at some point in the past to create developable land. The site contains several structures as well as a landscaped yard.

Climatic Conditions

Climate data were obtained using the USACE Antecedent Precipitation Tool version 1.0. Precipitation from the 90-day period preceding the wetland survey was approximately 6.01 inches at the site (Table 2). Precipitation in March was above normal and below normal in April and May. Precipitation data analysis in Table 2 resulted in a weighted condition value sum of 8 indicating climatic/hydrologic conditions in early June 2023 were drier than normal. This delineation also took place during the dry season.

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Table 2. Antecedent Precipitation Analysis

Wetlands

Field observations revealed that wetland conditions (i.e., positive indicators of wetland hydrology, vegetation, and soils) were not present on the day of inspection (Figure 5). There is, however, an offsite wetland located immediately northeast of the northeast property boundary.

Uplands

Representative data points were taken to confirm non-wetland conditions in upland areas. Upland data points include DP01-DP03 (Figure 5).

The hydric soil indicator Depleted Matrix (F3) was observed at DP01 and DP03. In addition, the indicator Redox Dark Surface (F6) was observed at DP02 and Depleted Below Dark Surface (A11) was observed at DP03.

The secondary indicator of wetland hydrology, FAC-Neutral Test (D5), was observed at DP03. No other wetland hydrology indicators were observed.

The plant communities at all upland data points passed the dominance test for the presence of hydrophytic vegetation.

All upland Data Points lacked at least one of the three parameters required to be classified as wetland (wetland hydrology, hydric soil, and hydrophytic vegetation) and were therefore classified as uplands. Data forms are presented in Appendix B.

Literature Cited

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

[NRCS] Natural Resources Conservation Service. 2018. Field Indicators of Hydric Soils in the United States; Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

[USACE] U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J.S. Wakeley, R. W. Lichvar, C.V. Noble, and J.F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

[USACE] U.S. Army Corps of Engineers. 2015. Special Public Notice: Guidelines for Submittal of Delineation Reports to the St. Paul District Corps of Engineers and the Wisconsin Department of Natural Resources. U.S. Army Corps of Engineers, March 2015.

[USACE] U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. Available at http://wetland-plants.usace.army.mil/. U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH.

Appendix A. Figures

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Figure 1 Project Location

Scheffler WD Dane County, WI | 89.2437°W 42.976°N



Reference: Project limits are approximate. The property boundaries depicted on this map have not been surveyed and are for prospect assessment purposes only. This information is not to be used as final legal boundaries. Imagery Source: ESRI Spatial Reference: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet Date Exported; 6/14/2023 Project Number; 109314







Figure 2 Topography

Scheffler WD Dane County, WI | 89.2455°W 42.9808°N



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Reference: Project limits are approximate. The property boundaries depicted on this map have not been surveyed and are for prospect assessment purposes only. This information is not to be used as final legal boundaries. Imagery Source: WROC Spatial Reference: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet Date Exported: 6/14/2023 Project Number; XXXXX





Figure 3 SSURGO Soils

Scheffler WD Dane County, WI | 89.2454°W 42.9809°N



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Reference: Project limits are approximate. The property boundaries depicted on this map have not been surveyed and are for prospect assessment purposes only. This information is not to be used as final legal boundaries. Imagery Source: WROC Spatial Reference: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet Date Exported: 6/14/2023 Project Number: #####





Figure 4 Wisconsin Wetland Inventory

Scheffler WD Dane County, WI | 89.2454°W 42.9809°N



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<u>Reference</u>: Project limits are approximate. The property boundaries depicted on this map have not been surveyed and are for prospect assessment purposes only. This information is not to be used as final legal boundaries. Imagery Source: WROC Spatial Reference: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet Date Exported; 6/23/2023 Project Number; XXXXXX







Figure 5 Delineated Wetlands

Scheffler WD Dane County, WI | 89.2454°W 42.9809°N



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<u>Reference</u>: Project limits are approximate. The property boundaries depicted on this map have not been surveyed and are for prospect assessment purposes only. This information is not to be used as final legal boundaries. Imagery Source; Bing <u>Spatial Reference</u>: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet <u>Date Exported</u>: 6/23/2023 <u>Project Number</u>; xxxxx



Appendix B. Data Forms

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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Scheffler Property Wetland Delineation	on City/County: Stoughton, Dane	9	Sampling Date: 06/01/23	
Applicant/Owner: Dave Scheffler		State: \	NI Sampling Point: DP01	
Investigator(s): Matt Parsons, Jack Krebs	Section, Township, Range: S	Section 18, Townshi	p 6 North, Range 11 East	
Landform (hillside, terrace, etc.): Terrace	Local relief (concave, convex, no	one): Convex	Slope (%): 1	
Subregion (LRR or MLRA): LRR K	_at: 42.981026461263376 Long: -89	.24523198724494	Datum: WGS 84	
Soil Map Unit Name: Houghton muck		NWI classifica	ation: none	
Are climatic / hydrologic conditions on the site typica	I for this time of year? Yes No >	(If no explain in	Remarks)	
Are Variated in the state typical	similia antico year interest a da antico year interesta a		anto Man y Ma	
Are vegetation \underline{X} , Soli \underline{X} , or Hydrology	significantiy disturbed? Are "Normal C	ircumstances" pres	ent? Yes <u>x</u> No	
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, exp	olain any answers ir	n Remarks.)	
SUMMARY OF FINDINGS – Attach site	map showing sampling point location	ns, transects, i	mportant features, etc.	
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Hydric Soil Present? Yes X No within a Wetland? Yes No X Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: No X Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis for this region and time period resulted in a weighted condition value sum of 8 indicating hydrologic conditions are drier than normal. Vegetation is disturbed due to managed plant community (manicured lawn); however the plant community was consider to be naturalized due to lack of intensive vegetation maintenance. Soil disturbed due to presence of historic fill, considered the normal circumstance since fill was likely placed several decades ago.				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)				
Surface Water (A1)	Drainage Pat	terns (B10)		
High Water Table (A2)	Moss Trim Lir	nes (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season V	Vater Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2)	Saturation Vis	sible on Aerial Imagery (C9)		

Presence of Reduced Iron (C4)

Thin Muck Surface (C7)

Depth (inches):

Other (Explain in Remarks)

Recent Iron Reduction in Tilled Soils (C6)

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

No x Depth (inches):

Yes No x Depth (inches):

Yes No x

Yes

Remarks:

Drift Deposits (B3)

Iron Deposits (B5)

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Algal Mat or Crust (B4)

Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Concave Surface (B8)

Stunted or Stressed Plants (D1)

Geomorphic Position (D2)

Microtopographic Relief (D4)

No X

Yes

Shallow Aquitard (D3)

FAC-Neutral Test (D5)

Wetland Hydrology Present?

VEGETATION – Use scientific names of plants.

	Sampling Point:	DP01
--	-----------------	------

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant	Indicator	Dominanco Tost workshoot
1 Acer saccharinum	20	Ves	FACW	Dominance rest worksheet.
	15	Voc		Number of Dominant Species
	15	Vee		$\frac{1}{1}$
4			FACO	Total Number of Dominant Species Across All Strata: 7 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:
7				Prevalence Index worksheet:
	50	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Fraxinus pennsylvanica	15	Yes	FACW	FACW species x 2 =
2. Rhamnus cathartica	10	Yes	FAC	FAC species x 3 =
3. Acer negundo	10	Yes	FAC	FACU species x 4 =
4. Acer saccharinum	7	No	FACW	UPL species x 5 =
5. Cornus racemosa	5	No	FAC	Column Totals: (A) (B)
6.				Prevalence Index = B/A =
7.				Hydrophytic Vegetation Indicators:
	47	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Poa pratensis	50	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹
2. Plantago rugelii	15	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting
3. Glechoma hederacea	10	No	FACU	data in Remarks or on a separate sheet)
4. Carex blanda	7	No	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
5. Prunella vulgaris	5	No	FAC	¹ Indiactors of budric coil and wattend budralogy must be
6. Taraxacum officinale	2	No	FACU	present, unless disturbed or problematic.
7. Parthenocissus quinquefolia	1	No	FACU	Definitions of Vegetation Strata:
8.				Tree Maadu slante 2 in (7.0 and) as more in discustor
9.				at breast height (DBH), regardless of height.
10 11.		·		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				Harb All borbaccous (non woody) plants, regardless
	90	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1		. <u> </u>		height.
2				
3				Hydrophytic Vegetation
4				Present? Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

DP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	ox Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/2	100					Loamy/Clayey	
4-9	10YR 4/1	70	5YR 4/6	30	С	М	Loamy/Clayey	Potential historic fill
9-11	10YR 2/1	60	10YR 5/2	40	D	М	Mucky Sand	Buried A horizon
11-20	10YR 2/1	99	5YR 4/6	1	С	PL	Mucky Sand	
							· ·	
							·	
	Concentration D-Der	letion R	M-Reduced Matrix C	S=Cover	ed or Coa	ted Sand	Grains ² Location	· DI - Dore Lining M-Matrix
Hydric So	bil Indicators:			0-00001			Indicators for Pro	blematic Hydric Soils ³ :
Histos	sol (A1)		Polyvalue Below	v Surface	e (S8) (LR	RR,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic	Epipedon (A2)		MLRA 149B)				Coast Prairie I	Redox (A16) (LRR K, L, R)
Black	Histic (A3)		Thin Dark Surfa	ice (S9) (LRR R, M	LRA 149	B) 5 cm Mucky P	eat or Peat (S3) (LRR K, L, R)
Hydro	ogen Sulfide (A4)		High Chroma S	ands (S1	1) (LRR K	K, L)	Polyvalue Belo	ow Surface (S8) (LRR K, L)
Stratified Lavers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)				face (S9) (LRR K, L)				
Stratilied Layers (A5) Loamy Mucky Mineral (F1) (LKR K, L) Thin Dark Surface (S9) (LKR K, L)			se Masses (F12) (I RR K I R)					
Depleted Below Dark Surface (A11)Loamy Gleyed Matrix (F2)Iron-Manganese Masses (F12) (LRR K, L, R) Thick Dark Surface (A12) X Depleted Matrix (F3)Piedmont Floodplain Soils (F19) (MLRA 149B)				odplain Soils (F19) (MLRA 149B)				
Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 1446, 149B)			(TA6) (MLRA 144A, 145, 149B)					
Sandy	Sandy Mucky Milleral (S1) Redox Dark Surface (F0) Mesic Spould (FAO) (MERK 144A, 145, 145b)			aterial (F21)				
Sandy Bedox (S5) Bedox Depressions (F8) Very Shallow Dark Surface (TE12)			Dark Surface (TF12)					
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)		n in Remarks)						
Dark	Surface (S7)			. ,			、、	,
³ Indicators	s of hydrophytic vegeta	tion and .	wetland hydrology mu	st be pre	sent, unle	ss disturb	ed or problematic.	
Type	e Layer (il observed)	•						
Depth (i	nches):						Hydric Soil Present	? Yes X No
Remarks:								

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Scheffler Property Wetland Delineation	City/County: Stoughton, Dane Sampling Date: 06/01/23
Applicant/Owner: Dave Scheffler	State: WI Sampling Point: DP02
Investigator(s): Matt Parsons, Jack Krebs	Section, Township, Range: Section 18, Town 6 North, Range 11 East
Landform (hillside, terrace, etc.): Terrace	ocal relief (concave, convex, none): Convex Slope (%): 1
Subregion (LRR or MLRA): LRR K Lat: 42.981118800	59353 Long: -89.24542967474665 Datum: WGS 84
Soil Map Unit Name: <u>Houghton muck</u>	NWI classification: none
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes <u>No X</u> (If no, explain in Remarks.)
Are Vegetation X , Soil , or Hydrology significant	ly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally p	roblematic? (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 X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repor Antecedent precipitation analysis for this region and time period result drier than normal. Vegetation is disturbed due to managed plant comr naturalized due to lack of intensive vegetation maintenance.	t.) ted in a weighted condition value sum of 8 indicating hydrologic conditions are nunity (manicured lawn); however the plant community was consider to be

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Wetland Hydrology Indicators:						Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)						Surface Soil Cracks (B6)			
Surface Water (A1)				Water-Stained Leaves (B9)		Drainage Patterns (B10)			
High Water Table (A2)				Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3) Marl Deposits (B15)						Dry-Season Water Table (C2)			
Water Marks (B1)		Crayfish Burrows (C8)							
Sediment Deposits (B2)		ving Roots (C3)	Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)				Presence of Reduced Iron (C	4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)				Recent Iron Reduction in Tille	ed Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)				Thin Muck Surface (C7)		Shallow Aquitard (D3)			
Inundation Visible on Ae	rial Imagery	/ (B7)		Other (Explain in Remarks)		Microtopographic Relief (D4)			
Sparsely Vegetated Con	cave Surfac	ce (B8)		_	FAC-Neutral Test (D5)				
Field Observations:									
Surface Water Present?	Yes	No	Х	Depth (inches):					
Water Table Present?	Yes	No	Х	Depth (inches):					
Saturation Present?	Yes	No	Х	Depth (inches):	Wetland Hy	Wetland Hydrology Present? Yes No X			
(includes capillary fringe)									
Describe Recorded Data (stre	eam gauge	, monitor	ring w	vell, aerial photos, previous ins	pections), if avai	lable:			
Remarks:									

VEGETATION – Use scientific names of plants.

Sampling Point: DP02

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer negundo	25	Yes	FAC	New York (Devices (Devices)
2. Ulmus americana	7	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>5</u> (B)
5		·		Percent of Dominant Species That Are OBL_FACW_or FAC: 80.0% (A/B)
7.				Prevalence Index worksheet:
	32	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		•		OBL species x 1 =
1. Rhamnus cathartica	20	Yes	FAC	FACW species x 2 =
2. Celtis occidentalis	12	Yes	FAC	FAC species x 3 =
3. Ribes americanum	8	No	FACW	FACU species x 4 =
4. Fraxinus pennsylvanica	7	No	FACW	UPL species x 5 =
5. Cornus racemosa	5	No	FAC	Column Totals: (A) (B)
6.				Prevalence Index = B/A =
7.				Hydrophytic Vegetation Indicators:
	52	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Poa pratensis	60	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹
2. <u>Carex blanda</u>	10	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting
3. <u>Glechoma hederacea</u>	10	No	FACU	data in Remarks or on a separate sheet)
4. Elymus repens	5	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5. Plantago rugelii	5	No	FAC	¹ Indicators of hydric soil and wetland hydrology must be
6. Taraxacum officinale	2	No	FACU	present, unless disturbed or problematic.
7. Daucus carota	1	No	UPL	Definitions of Vegetation Strata:
8. Parthenocissus quinquefolia	1	No	FACU	Tree – Woody plants 3 in (7.6 cm) or more in diameter
9. Oxalis stricta	1	No	FACU	at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH and
11				greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	95	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in height
2		·		
2.				Hydrophytic
а				Vegetation Procent? Ves X No
		=Total Cover		
Remarks: (Include photo numbers here or on a senar	ate sheet)			
	ale sheet.)			

Sampling Point:

Profile De	scription: (Describe	to the de	epth needed to docur	nent the	indicato	r or confi	rm the absence of ir	ndicators.)
Depth	 Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 2/2	100					Loamy/Clayey	
5-12	10YR 3/1	75	7.5YR 4/6	25	С	М	Loamy/Clayey	Prominent redox concentrations
1								
Type: C=	Concentration, D=Dep il Indicators:	pletion, R	M=Reduced Matrix, CS	S=Cover	ed or Coa	ted Sand	Grains. ² Locat	tion: PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histos	ol (A1)		Polyvalue Below	/ Surface	: (S8) (L R	R R.	2 cm Muck	(A10) (LRR K. L. MLRA 149B)
Histic	Epipedon (A2)		MLRA 149B)		(00)(=1	,	Coast Prair	rie Redox (A16) (LRR K, L, R)
Black	Histic (A3)		Thin Dark Surfac	ce (S9) (LRR R, M	LRA 149	B) 5 cm Muck	y Peat or Peat (S3) (LRR K, L, R)
Hydro	gen Sulfide (A4)		High Chroma Sa	ands (S1) 1) (LRR K	(, L)	Polyvalue E	Below Surface (S8) (LRR K, L)
Stratifi	ied Layers (A5)		Loamy Mucky M	lineral (F	1) (LRR K	ζ, L)	Thin Dark S	Surface (S9) (LRR K, L)
Deplet	ted Below Dark Surfa	ce (A11)	Loamy Gleyed M	/atrix (F2	2)	. ,	Iron-Manga	anese Masses (F12) (LRR K, L, R)
Thick	Dark Surface (A12)		Depleted Matrix	(F3)			Piedmont F	Floodplain Soils (F19) (MLRA 149B)
Sandy	Mucky Mineral (S1)		X Redox Dark Sur	face (F6))		Mesic Spoo	dic (TA6) (MLRA 144A, 145, 149B)
Sandy	Gleyed Matrix (S4)		Depleted Dark S	Surface (I	F7)		Red Paren	t Material (F21)
Sandy	Redox (S5)		Redox Depressi	ons (F8)			Very Shallo	ow Dark Surface (TF12)
Strippe	ed Matrix (S6)		Marl (F10) (LRR	Κ, L)			Other (Exp	lain in Remarks)
Dark S	Surface (S7)							
³ Indiantora	of budrophytic vegete	tion and	votional budrology mus	the pro	ant unla	a diaturb	ad ar problematic	
Restrictive	of hydrophytic vegeta	tion and .	wetland hydrology mus	st be pres	sent, unie:	ss disturd	ed or problematic.	
Type: G	iravel	•						
Depth (ir	nches):	12					Hydric Soil Prese	ent? Yes <u>X</u> No
Remarks:								

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Scheffler Property Wetland Del	neation C	n City/County: Stoughton, Dane Sampling Date: 06/01					
Applicant/Owner: Dave Scheffler			State:	WI	Sampling Poin	:: DP03	
Investigator(s): Matt Parsons, Jack Krebs	S	ection, Township, Range:	Section 18, Town	nship 6 N	orth, Range 11 I	East	
Landform (hillside, terrace, etc.): Terrace	Slope (%	6): 1					
Subregion (LRR or MLRA): LRR K	Lat: <u>42.98095257275</u>	3994 Long: -	89.2451046444356	6	Datum: V	/GS 84	
Soil Map Unit Name: Houghton muck			NWI class	ification:	none		
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes <u>No</u>	X (If no, explain	n in Rem	arks.)		
Are Vegetation, SoilX_, or Hydr	ologysignificantly of	disturbed? Are "Normal	Circumstances" p	resent?	Yes X	No	
Are Vegetation, Soil, or Hydr	ologynaturally prol	blematic? (If needed, e	explain any answer	rs in Rem	arks.)		
SUMMARY OF FINDINGS – Attach	site map showing sa	ampling point locati	ons, transects	s, impo	ortant feature	es, etc.	
Hydrophytic Vegetation Present? Ye	es X No	Is the Sampled Area					
Hydric Soil Present? Ye	s X No	within a Wetland?	Yes	No	<u>X</u>		
Demode (Embrine Itere finance Itere		n yes, optional wettand					
Remarks: (Explain alternative procedures he Antecedent precipitation analysis for this regi drier than normal. Soil disturbed due to prese	re or in a separate report.) on and time period resulted nce of historic fill, considere	in a weighted condition va ed the normal circumstance	llue sum of 8 indica e since fill was like	ating hyd ly placed	rologic conditior several decade	s are s ago.	
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indi	icators (n	ninimum of two r	equired)	

Wetland Hydrology Indicato	ors:						Secondary Indicators	(minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)						Surface Soil Cra	Surface Soil Cracks (B6)		
Surface Water (A1) Water-Stained Leaves (B9)						Drainage Patterr	ns (B10)		
High Water Table (A2) Aquatic Fauna (B13)						Moss Trim Lines	(B16)		
Saturation (A3)			Ma	rl Deposits (B1	5)		Dry-Season Wat	er Table (C2)	
Water Marks (B1)			Hy	drogen Sulfide (Odor (C1)		Crayfish Burrows	s (C8)	
Sediment Deposits (B2)			Ox	idized Rhizosph	eres on Livir	ng Roots (C3)	Saturation Visible	e on Aerial Imagery (C9)	
Drift Deposits (B3)			Pre	esence of Redu	ced Iron (C4))	Stunted or Stress	sed Plants (D1)	
Algal Mat or Crust (B4)			Re	cent Iron Reduc	ction in Tilled	Soils (C6)	Geomorphic Pos	ition (D2)	
Iron Deposits (B5)			Th	in Muck Surface	e (C7)		Shallow Aquitard	l (D3)	
Inundation Visible on Ae	rial Imagery	(B7)	Oth	ner (Explain in F	Remarks)		Microtopographi	c Relief (D4)	
Sparsely Vegetated Con	cave Surface	e (B8)					X FAC-Neutral Tes	st (D5)	
Field Observations:									
Surface Water Present?	Yes	No	X C	epth (inches):					
Water Table Present?	Yes X	No	C	epth (inches):	26				
Saturation Present?	Yes X	No	C	epth (inches):	24	Wetland Hy	/drology Present?	Yes No X	
(includes capillary fringe)									
Describe Recorded Data (stre	eam gauge,	monito	ring well,	aerial photos, p	revious inspe	ections), if avail	lable:		
Remarks:									

VEGETATION - Use scientific names of plants.

Sampling Point: DP03

<u>Tree Stratum</u> (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. Acer saccharinum	30	Yes	FACW	Number of Dominant Species			
2. Acer negundo	20	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)			
3				Total Number of Dominant			
4				Species Across All Strata: 5 (B)			
5				Percent of Dominant Species			
6				That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)			
7				Prevalence Index worksheet:			
	50	=Total Cover		Total % Cover of: Multiply by:			
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =			
1. Acer negundo	20	Yes	FAC	FACW species x 2 =			
2. Fraxinus pennsylvanica	10	Yes	FACW	FAC species x 3 =			
3. Rhamnus cathartica	5	No	FAC	FACU species x 4 =			
4. Cornus alba	5	No	FACW	UPL species x 5 =			
5. Juglans nigra	2	No	FACU	Column Totals: (A)(B)			
6				Prevalence Index = B/A =			
7				Hydrophytic Vegetation Indicators:			
	42	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation			
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%			
1. Phalaris arundinacea	70	Yes	FACW	3 - Prevalence Index is ≤3.0 ¹			
2. <u>Glechoma hederacea</u>	20	No	FACU	4 - Morphological Adaptations ¹ (Provide supportin			
3. Impatiens capensis	20	No	FACW	data in Remarks or on a separate sheet)			
4. Solidago gigantea	5	No	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)			
5		·		¹ Indicators of hydric soil and wetland hydrology must be			
6		·		present, unless disturbed or problematic.			
7				Definitions of Vegetation Strata:			
8				Tree – Woody plants 3 in. (7.6 cm) or more in diameter			
9				at breast height (DBH), regardless of height.			
10				Sapling/shrub – Woody plants less than 3 in. DBH			
11		·		and greater than or equal to 3.28 ft (1 m) tall.			
12		·		Herb – All herbaceous (non-woody) plants, regardless			
	115	=Total Cover		of size, and woody plants less than 3.28 ft tall.			
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in			
1		·		height.			
2		·		Hydrophytic			
3				Vegetation			
4		·		Present?			
	0	=Total Cover					
Remarks: (Include photo numbers here or on a separ	ate sheet.)						

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Profile De	escription: (Describe	to the de	epth needed to docur	ment the	indicato	or confi	rm the absence of indica	tors.)	
Depth	Matrix		Redo	x Feature	es 1				
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture	Remarks	
0-6	10YR 3/2	100					Sandy	Potential historic fill	
6-12	10YR 4/2	90	5YR 4/6	10	С	Μ	Loamy/Clayey	Potential historic fill	
12-25	10YR 2/1	100					Mucky Sand	Buried A horizon	
25-28	10YR 5/2	100					Sandy		
¹ Type: C=	Concentration, D=Dep	letion, R	M=Reduced Matrix, C	S=Covere	ed or Coa	ted Sand	Grains. ² Location:	PL=Pore Lining, M=Matrix.	
Hydric So	oil Indicators:						Indicators for Probl	ematic Hydric Soils ³ :	
Histos	sol (A1)		Polyvalue Below	/ Surface	(S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic	Epipedon (A2)		MLRA 149B)	aa (SO) (I			Coast Prairie Re	edox (A16) (LRR K, L, R)	
	$\operatorname{HISUC}(A3)$		High Chroma Sc	ce (59) (L ande (S11		LKA 1490	5) 5 cm Mucky Pea	(10) Pear (33) (LRR R, L, R)	
Stratit	fied Lavers (A5)			lineral (F		, L) ()	Thin Dark Surface (S9) (I RR K I)		
X Deple	eted Below Dark Surfac	ce (Δ11)		/atrix (F2		, L)	Iron-Manganese Masses (F12) (I RR K I R)		
Thick	Dark Surface (A12)		X Depleted Matrix	(F3)	/		Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sand	v Muckv Mineral (S1)		Redox Dark Sur	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sand	y Gleved Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent Material (F21)		
Sand	y Redox (S5)		Redox Depressi	ons (F8)	,		Very Shallow Dark Surface (TF12)		
Stripp	bed Matrix (S6)		Marl (F10) (LRR	κ, Ľ)			Other (Explain in Remarks)		
Dark	Surface (S7)								
³ Indicators	s of hydrophytic vegeta	tion and v	wetland hydrology mus	st be pres	ent unles	ss disturbe	ed or problematic		
Restrictiv	ve Layer (if observed)		noualla njarologj ma						
Type:									
Depth (i	inches):						Hydric Soil Present?	Yes X No	
Remarks:									

Appendix C. Site Photographs

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Photo 1. DP01 looking southwest at upland area (June 1, 2023).



Photo 3. DP03 looking northeast at upland area (June 1, 2023).



Photo 5. Photo-point 02 looking north at offsite wetland (June 1, 2023).



Photo 2. DP02 looking northeast at upland area (foreground) and offsite wetland (background) (June 1, 2023).



Photo 4. Photo-point 01 looking northeast at offsite wetland (June 1, 2023).



Photo 6. Photo-point 03 looking northeast (June 1, 2023).



Photo 7. Photo-point 03 looking southeast (June 1, 2023).



Photo 8. Photo-point 03 looking southwest (June 1, 2023).



Photo 9. Photo-point 03 looking northwest (June 1, 2023).



Photo 10. Photo-point 04 looking northeast (June 1, 2023).



Photo 11. Photo-point 04 looking southeast (June 1, 2023).



Photo 12. Photo-point 04 looking southwest (June 1, 2023).



Photo 13. Photo-point 04 looking northwest (June 1, 2023).