Wetland Delineation Report

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Leitner Property

Town of Pleasant Springs, Dane County Wisconsin

November 10th, 2015

Prepared for:

Mr. Don Leitner
2611 Penny Lane
Stoughton, WI 53589

Prepared by:

Mr. Scott O. Taylor
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TAYLOR CONSERVATION LLC

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Wetland Delineator Qualifications

Scott Taylor holds a Master of Science degree in Forest Ecology and Management from the University of Wisconsin-Madison (1999). Taylor has attended the "Critical Methods in Wetland Delineation" training course annually since 2006. Taylor is an **Assured Wetland Delineator** under Wisconsin Department of Natural Resources guidelines. Taylor also completed the following courses that prepared him for performing wetland determinations and delineations in Wisconsin using the Army Corps of Engineers 1987 Manual Method:

- Wetland Plant Identification (July 2003, Delafield, WI. – Biotic Consultants, Inc.)
- Basic Wetland Delineation Training (August 2006, Cable, WI. – University of Wisconsin, La Crosse Continuing Education & Extension)
- Advanced Wetland Delineation Training (July 2012, LaCrosse, WI – University of Wisconsin, La Crosse Continuing Education & Extension).
- Hydric Soils Identification (June 2014, UW-Waukesha Field Station - University of Wisconsin, La Crosse Continuing Education & Extension).

Introduction

On August 7th of 2015, Scott Taylor of Taylor Conservation, LLC performed wetland determinations and delineations on the Leitner property in the Town of Pleasant Springs, Dane County, Wisconsin (Figure 1). Two parcels were investigated (Lots 1 & 2), one on either side of Penny Lane (Figure 2). The parcels consisted of tree groves and brush. Most of the brush in Lot 2 had been cut with a forestry mower earlier in the growing season.

A large portion of Lot 2, which occupied the fringe of a wetland complex extending far beyond the investigation area boundaries, was found to be wetland (Wetlands 1 & 2). A small portion of Lot 1, which generally occupied higher-lying ground than Lot 2, was found to be wetland (Wetland 3; Figure 2).

The property owner, Mr. Don Leitner, would like to sell the lots as home sites. He ordered a wetland delineation to determine if there was enough space to build homes.

The investigation area was 3.2 acres (Lot 1 – 1.5 acres; Lot 2 – 1.7 acres). A total of approximately 0.6 acre of wetlands was delineated (Wetland 1 – 0.4 acre; Wetland 2 – 1,300 square feet; Wetland 3 – 6,400 sf). The site is in Section 28 (NWNW) T6N, R11E.

The purpose of this report is to explain the results of the wetland delineation and to describe the features of the wetlands and non-wetlands (uplands) in the project area.

Methods

The following reference materials were reviewed prior to performing fieldwork:

1) Natural Resource Conservation Service, Soil Survey.

2) Wisconsin Wetland Inventory (WDNR Surface Water Data Viewer – Wetlands & Wetland Indicators Theme).
3) United States Geological Survey 7.5-minute quadrangle map, Stoughton Quadrangle.
4) Natural Resource Conservation Service, hydric soils list for Dane County.

The wetland determinations and the delineations followed the procedures for the Routine Method set forth in The Corps of Engineers Wetlands Delineation Manual (US Army Corps of Engineers 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northeast & Northcentral Region. They also followed the methods set forth in the Basic Guide to Wisconsin Wetlands and their Boundaries (WI Dept. of Administration 1995).

Method of Data Collection

Vegetation, hydrology and soil information were gathered in sample plots and recorded on U.S. Army Corps of Engineers "Wetland Determination Data Forms" for the appropriate region. At each plot, a plot center was established and the presence or absence of normal circumstances or disturbances was noted. Next, herbaceous vegetation was sampled within a circular 5-foot radius plot. After that, vines, shrubs and trees were sampled within a circular 30-foot radius plot, centered on the herbaceous plot. Next, an 20 inch-deep (at minimum) soil pit was dug at the plot center. The presence or absence of hydrology indictors in the soil pit and within the surrounding 30-foot circular plot was noted. Finally, the soil profile in the pit was examined and described. A determination was then made as to whether the site was wetland or upland.

Location of Transects

Sample plots were located inside of areas that appeared to have potential be wetlands. If the sample plot data suggested that the location was inside of a wetland, a second plot was placed in an upslope location with a different plant community. If data collected at this plot suggested that the location was inside of the upland, no further plots were sampled. Otherwise, the process was repeated. A total of 8 plots were sampled, 4 inside of wetlands and 4 on the uplands (Figure 2). Sample plots were marked with red wire-stake flags.

Procedure for Locating Wetland Boundaries

The wetland boundaries were located by observing gradual increases in elevation and changes in plant community composition. The presence of healthy, dominant populations of upland plants, such as black raspberry (*Rubus occidentalis*-Upl), honeysuckle (*Lonicera X bella*-FacU), and milkweed (*Asclepias syriaca*-FacU), as one moved upslope, away from the wetland, was often considered a reliable indicator of the wetland boundary.

Results and Discussion

Wetlands

Overview of Wetlands & Wetland Boundary Characteristics

Three wetlands were identified. The wetlands were partially wooded, brushy areas with grassy, herbaceous ground layers (Figure 2). Wetland 1 was the northernmost extension of a large wetland complex that extends far beyond the project area.

Although the wetlands possessed moderate tree and brush cover, the grassy, herbaceous ground layers best characterized wetlands 1 and 3, which would therefore be classified as **fresh (wet) meadows.**

Wetland 2, which was heavily shaded and mostly empty of ground layer vegetation, would be classified as a **forested wetland.**

Based on their floristic quality, wetlands 1 and 3 would have **moderate susceptibility** to storm-water runoff impacts. Wetland 2, which is almost completely empty of ground layer vegetation, would have **low susceptibility** to storm-water runoff.

The wetland boundaries were gradual. They were not marked by sharp slope breaks or strong vegetative transitions. However, the distribution of several upland plant species formed a relatively distinct boundary. These included honeysuckle, black raspberry and creeping Charlie (*Glechoma hederacea*-FacU).

Wetland Vegetation

The wetlands were heavily dominated by hydrophytic plant species. Reed canary grass (*Phalaris arundinacea*-FacW), giant goldenrod (*Solidago gigantea*-FacW), false nettle (*Boehmeria cylindrical*-Obl), red top grass (*Agrostis stolonifera*-FacW) and blunt broom sedge (*Carex tribuloides*-FacW) dominated the ground layer. Red osier dogwood (*Cornus alba*-FacW), buckthorn (*Rhamnus cathartica*-Fac) and bebb's willow (*Salix bebbiana*-FacW) dominated the shrub layer. Cottonwood (*Populus deltoides*-Fac), box elder (*Acer negundo*-Fac) and silver maple (*Acer saccharinum*-FacW) dominated the tree layer.

Wetland Hydrology

The wetlands' chief water sources are surface runoff from surrounding uplands and persistently high water tables in low areas. The wetlands probably saturate in the spring of most years and during rainy periods. They probably become dry by early summer of most years.

Prior Rainfall Analysis:

(USDA Field Office Climate Data – WETS Station: Stoughton, Wisconsin.)

	30% chance will have precipitation (inches)						
	less than:	more than:	**2015 precipitation:**	Condition	Condition value (Dry=1, Normal=2, Wet=3)	Month weight value	Product of previous two columns
May	2.22	4.14	**4.61**	**Wet**	**3**	**1**	**3**
June	2.56	4.59	**4.09**	**Normal**	**2**	**2**	**4**
July	2.83	4.48	**3.61**	**Normal**	**2**	**3**	**6**
						Sum:	**13**

(If sum is 6-9, prior period dry; 10-14, prior period normal; 15-18, prior period wet. From USDA, Natural Resource Conservation Service. 1997. Hydrology Tools for Wetland Determination. Part 650. Engineering Field Handbook.)

A sum of 13 indicates that moisture conditions in the prior period were **normal**. Zero inches of rainfall were recorded at the Stoughton weather station in the current month (August).

No water was directly observed in any of the wetland sample plots, however the primary hydrology indicator, Sparsely Vegetated Concave Surface, was noted in wetland sample plots 2A and 3.

All wetland plots showed the two secondary hydrology indicators, "Geomorphic Position" and "FAC Neutral Test". The plots showed "Geomorphic Position" due to their landscape positions on the bottoms of depressions where frequent, prolonged saturation and/or inundation were likely.

Wetland Soils

The Natural Resource Conservation Service-mapped soil of the wetlands is Wacousta silty clay loam (Wa; Figure 4). Wacousta soil is classified as very poorly drained. It is listed as a hydric soil In Dane County.

The field-observed soils in Wetland 1 consisted of black (10 YR 2/1) silt loam underlain by lighter-colored, low-chroma (10 YR 4/2; 2.5 Y 6/2) silty clay loam. The soils of Wetlands 2 and 3 showed evidence of fill placement, or possibly deposition of eroded sediment. They consisted of alternating layers of brown (10 YR 3/3) and dark brown (10 YR 3/2, 2/2) silt loam and silty clay loam.

Two of 4 wetland sample plots (1A & 1B) showed the hydric soil indicator, "Thick Dark Surface" (A12). The remaining 2 wetland sample plots (2A & 3) did not show hydric soil indicators. However professional judgment was used to assume the soils were hydric based on strong vegetation, hydrology and landscape position indicators.

Wisconsin Wetland Inventory

The Wisconsin Wetlands Inventory (W.W.I.) identifies a tree and shrub-dominated wetland (T3/S3K) in the investigation area that encompasses all field-identified wetlands (Figure 5). Discrepancies between the W.W.I. and field-identified wetland boundaries reflect the greater accuracy of field methods over interpretation of wetland boundaries from aerial photographs, which is the method used in the W.W.I.

Uplands

The uplands were the wooded and brushy areas that occupied the high-lying ground (Figure 2). Most of the upland in Lot 2 had been mowed with a forestry mower earlier in the growing season. Hence there were fewer shrubs than before mowing, however most of the cut shrubs were re-sprouting.

Upland Vegetation

Upland vegetation was a mix of upland and Fac and FacW-rated hydrophytes. Enchanter's nightshade (*Circaea Canadensis*-FacU), creeping charlie, burdock (*Arctium minus*-FacU), reed canary grass, woodbine (*Parthenocissus quinquefolia*-FacU) and giant goldenrod, among many other species, dominated upland ground layers. Honeysuckle, buckthorn, silver maple, box

elder, black cherry (*Prunus serotina*-FacU), sumac (*Rhus hirta*-Upl) and cottonwood dominated upland shrub and tree layers.

Upland sample plots 1D and 2C showed dominance by hydrophytic species. This reflected the abundance of Fac and FacW-rated plants like buckthorn, silver maple and box elder. While hydrophytic, these species still thrive in moist uplands. The presence of upland plant populations, as well as the absence of hydric soil and wetland hydrology indicators, strongly suggested these sites were non-wetlands and therefore capable of supporting dominance by upland vegetation.

Upland Hydrology

No hydrology indicators were noted in any of the upland sample plots. All parts of the uplands occupied high-lying or sloping ground where water would be unlikely to linger for long periods.

Upland Soils

The Natural Resource Conservation Service-mapped soils of the uplands are (Figure 4):

Soil	Drainage class	Percent Hydric
Wacousta silty clay loam (Wa)	Very Poorly Drained	100%
Whalan silt loam (WxC2)	Well Drained	0%

The field-observed upland soils consisted of alternating layers of dark brown and brown (10 YR 3/2, 2/2, 3/3, 4/4) silt loam and silty clay loam. Irregular surface contours, suggesting placement of fill in the distant past, were noted surrounding plot 2B in Lot 1.

No hydric indicators were observed in any of the upland sample plots.

Conclusion

The wetland boundary marked in the field is the best estimate of the location of the boundary based on the available vegetation, hydrology and soil evidence on August 7th of 2015. Wetland boundaries can change over time with changes in vegetation, precipitation, or regional hydrology. The US Army Corps of Engineers and/or the Wisconsin Department of Natural Resources have authority to make the final decision regarding the wetland boundary. Personnel from these agencies may adjust the boundary upon field inspection.

Activities within or close to the delineated wetland boundaries generally require permits from the Army Corps of Engineers, WDNR or local authorities. If the client proceeds with any work within or close to the delineated wetland boundaries without authorization or permits from the appropriate regulatory authorities, Scott Taylor or Taylor Conservation LLC shall not be responsible or liable for any resulting damages.

Scott Taylor is an **Assured Wetland Delineator** under Wisconsin Department of Natural Resources guidelines (http://dnr.wi.gov/topic/wetlands/assurance.html). Taylor's wetland delineations are considered dependable by the WDNR for purposes of Wisconsin wetland and waterway permits, shoreland-wetland zoning or other

state-mandated local wetland programs. Therefore Taylor's clients do not require concurrence letters from WDNR before project planning or permit applications that are based on Taylor's wetland delineations. However, concurrence from the Army Corps of Engineers is still necessary. The WDNR and Army Corps have final authority over wetlands in Wisconsin. They may adjust Taylor's wetland boundaries. Assurance does not change decisions about wetland fill. Assurance is not a guarantee of accuracy or relief from landowner responsibility in the event an error occurs and wetlands are filled. While it is unlikely for a professional whose work is assured, inadvertent wetland fill that may result from errors must be remedied.

References

Hurt, G.W. & Vasilas, L.M. 2010. Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils, Version 7.0. Natural Resource Conservation Service, United States Department of Agriculture.

Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner, US Army Corp of Engineers, 2014. State of Wisconsin 2014 Wetland Plant List.

US Army Corps of Engineers, Waterways Experiment Station. 1987. Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1.

USDA, Natural Resource Conservation Service. 1997. Hydrology Tools for Wetland Determination. Part 650. Engineering Field Handbook.

Wisconsin Department of Administration, Coastal Management Program. 1995. Basic Guide to Wisconsin's Wetlands and their Boundaries.

Figures

Figure 1: Landscape Overview.

Source: Imagery - National Agricultural Imagery Program, 2013; Roads & Waters – Wisconsin Department of Natural Resources.

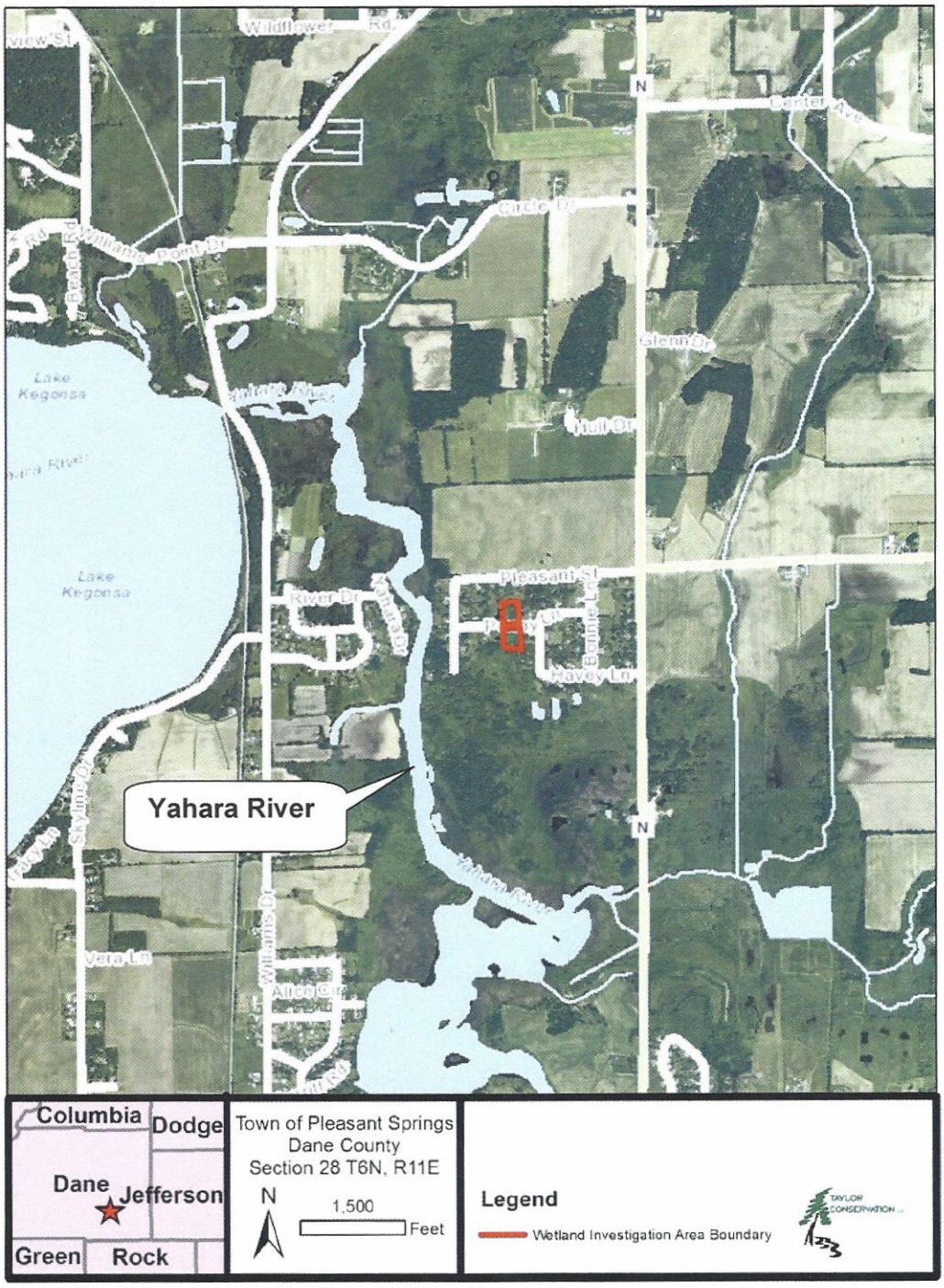


Figure 2: Investigation Area, Wetlands & Sample Plots.
Source: National Agricultural Imagery Program, 2013.

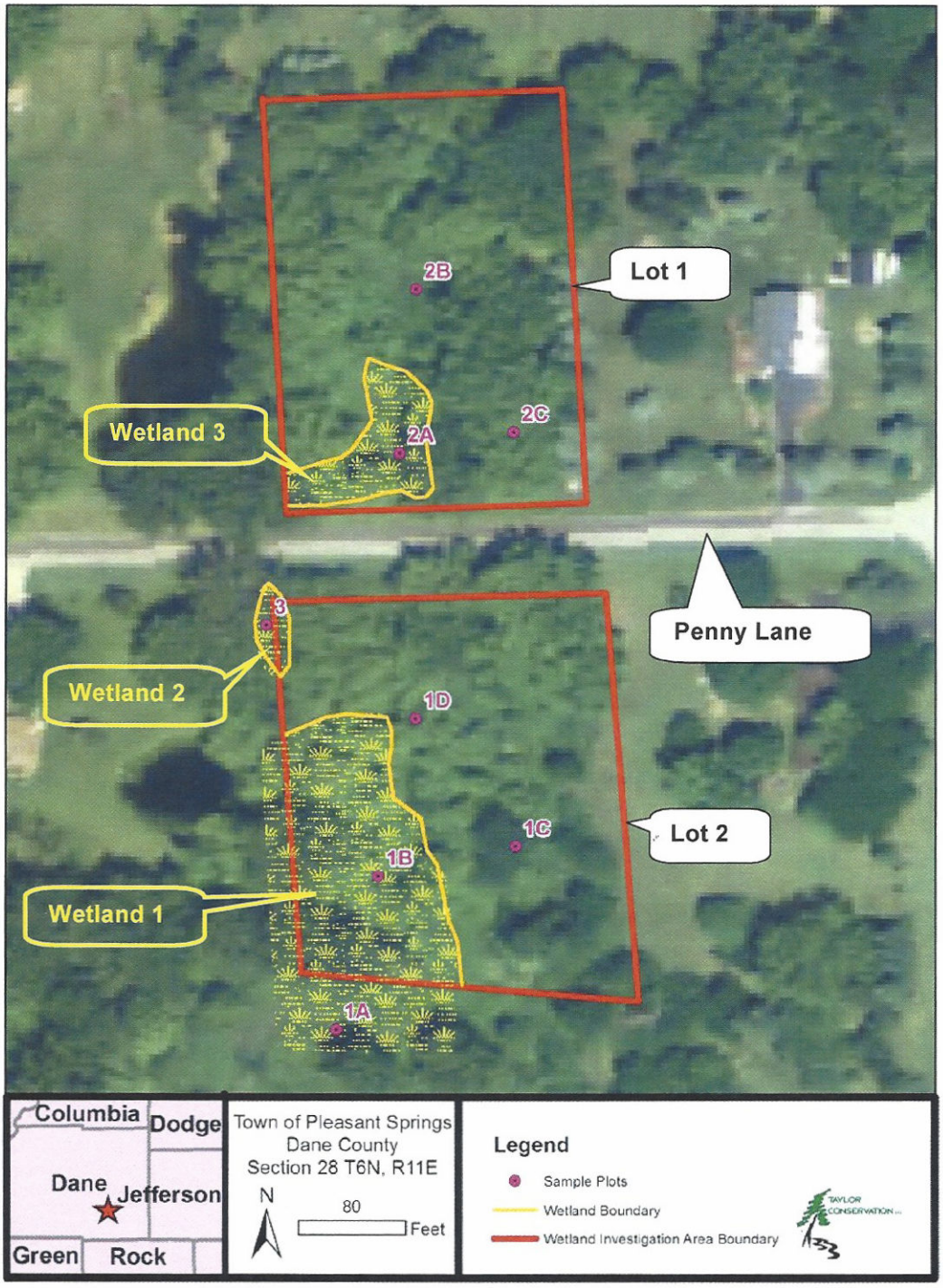


Figure 3: Topography.
Source: U.S. Geological Survey 7.5-Minute Quadrangle Map, Stoughton Quadrangle.

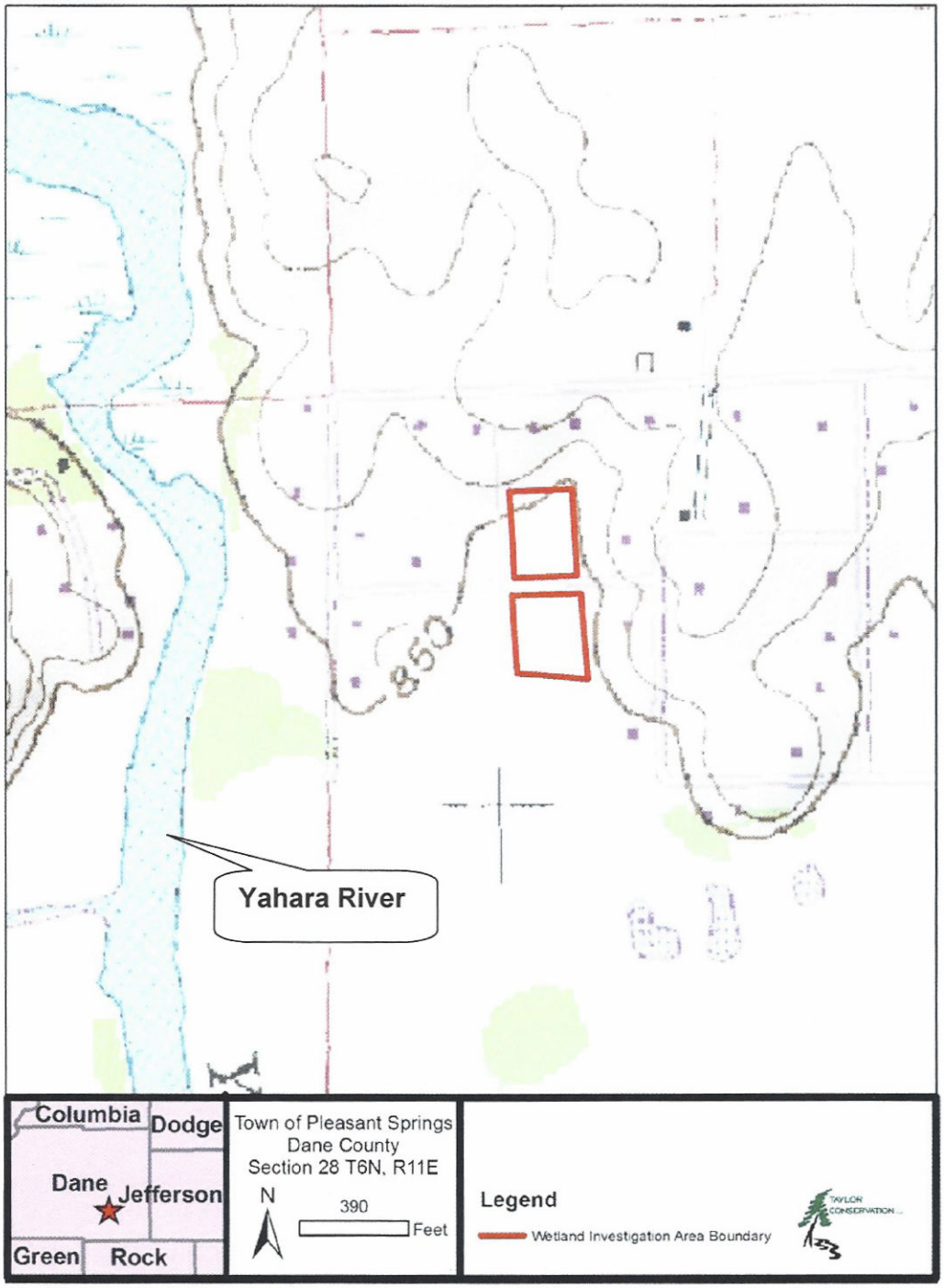


Figure 4: Soils.

Source: Natural Resource Conservation Service.

Investigation Area Soils	Drainage class	Percent Hydric
Wacousta silty clay loam (Wa)	Very Poorly Drained	100%
Whalan silt loam (WxC2)	Well Drained	0%

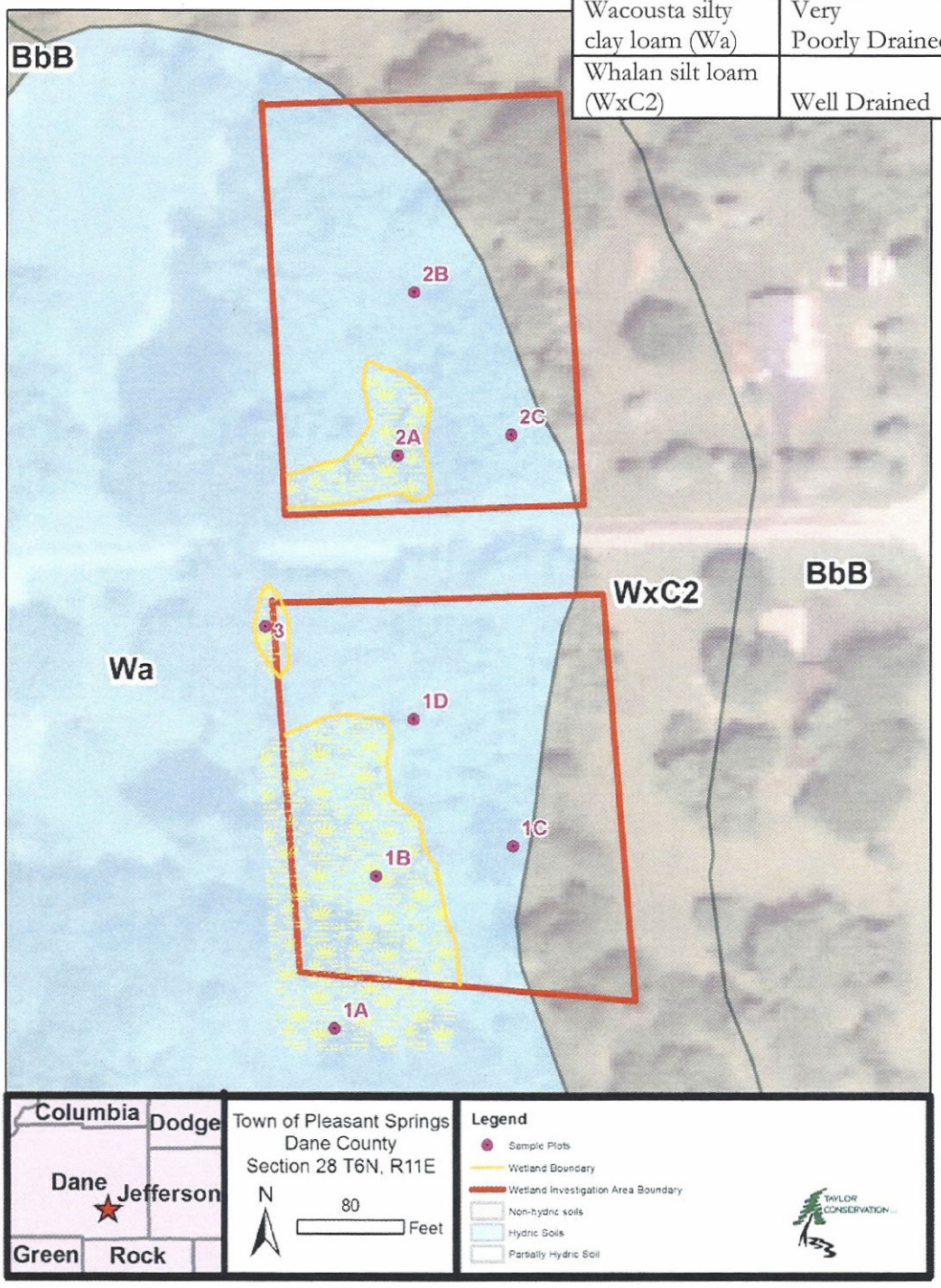
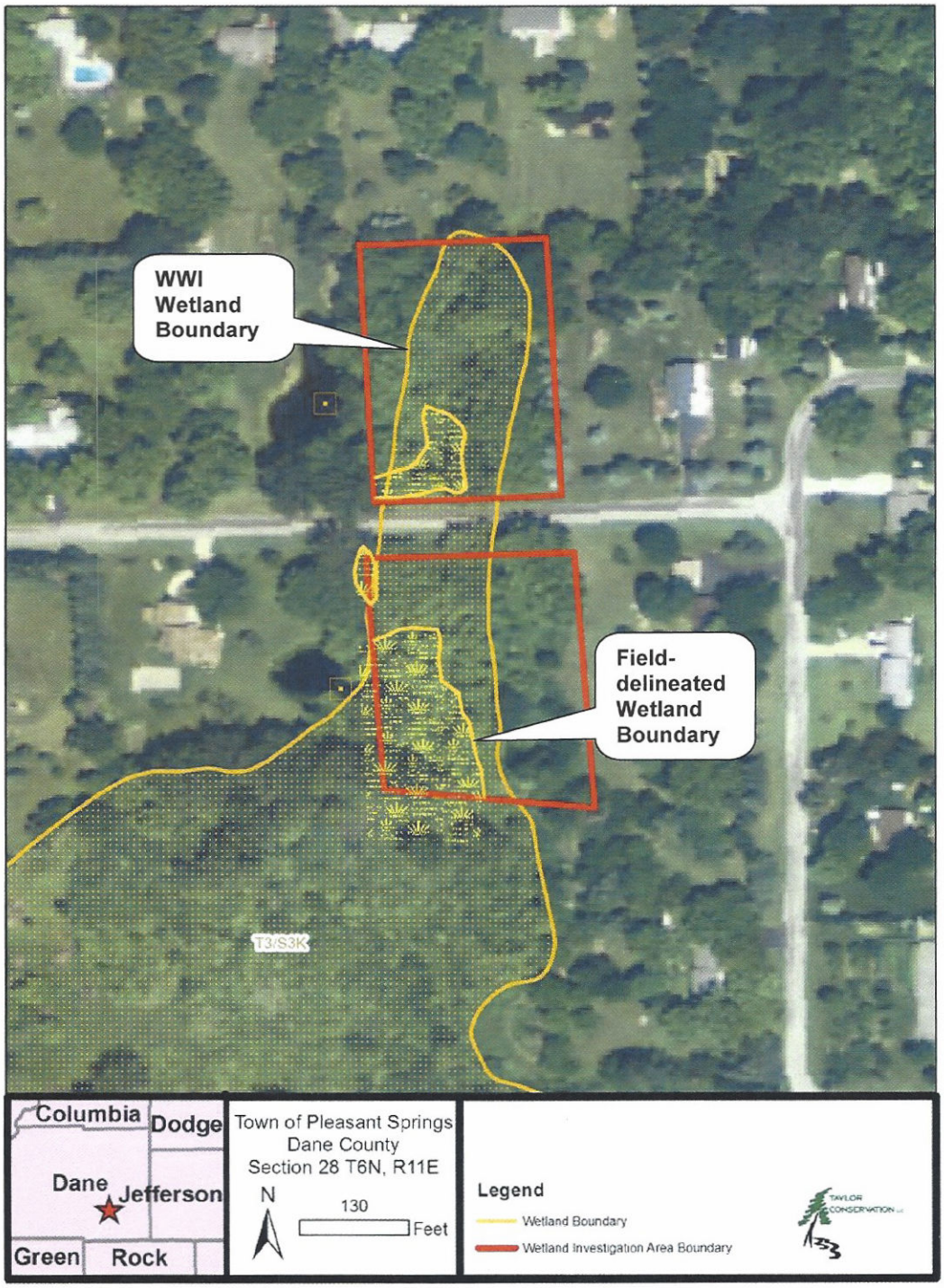
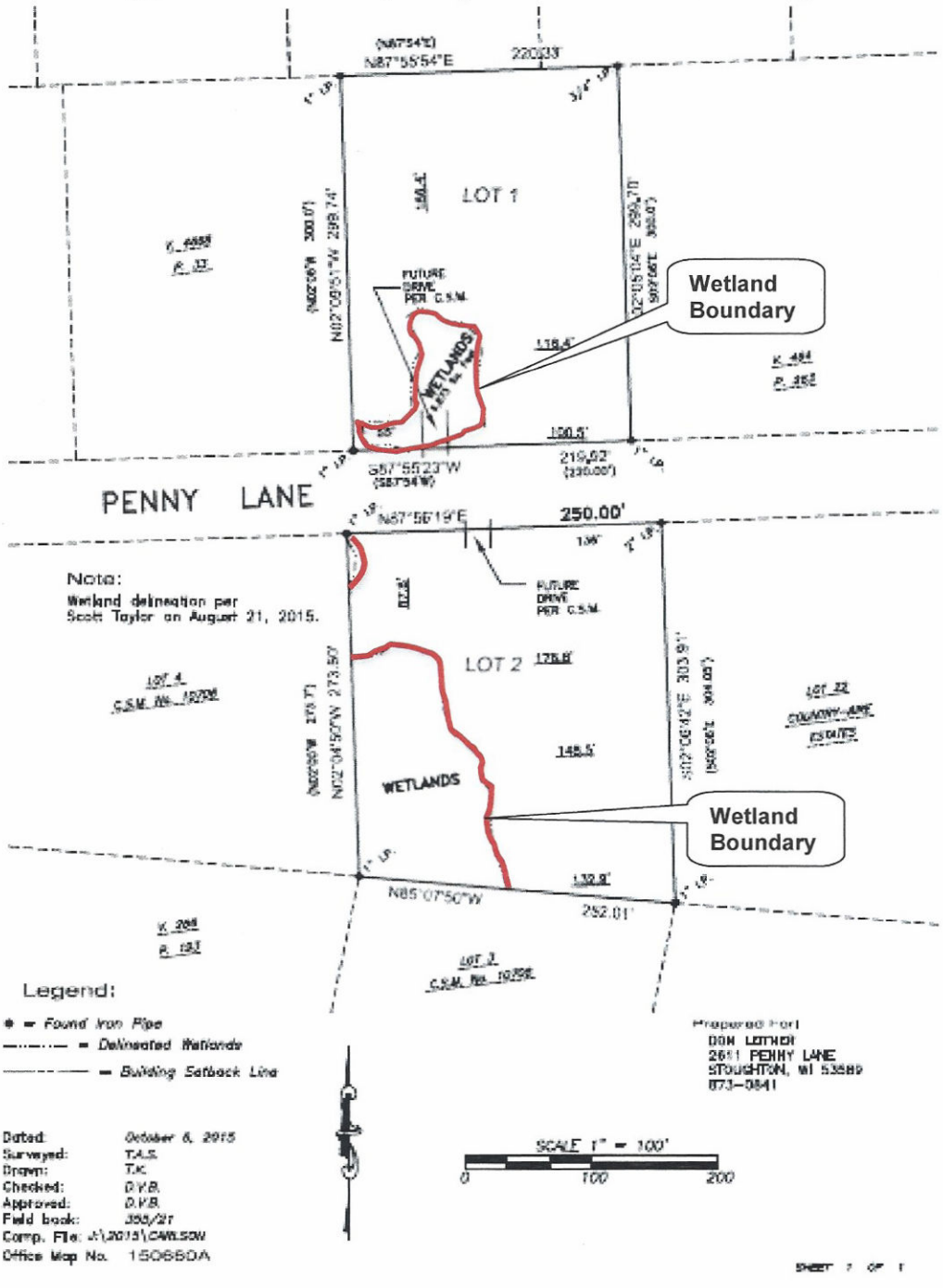


Figure 5: Wisconsin Wetland Inventory Map.
Source: Wisconsin Department of Natural Resources.



Appendix I: Survey Map of Wetland Boundary



Appendix II: Investigation Area Photos

Wetland - Plot 1A

Wetland - Plot 1B

Upland - Plot 1C

Wetland - Plot 2A

Upland - Plot 2B

Wetland - Plot 3

Appendix III: Data Sheets

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Owner: Don Leitner State: WI Sampling Point: 1A
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/Toeslope Local relief (concave, convex, none): None
Slope (%): 0 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 16N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: T3/S3K
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil , or hydrology naturally problematic? No Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Yes	Is the sampled area within a wetland?	Yes
Hydric soil present?	Yes	If yes, optional wetland site ID:	
Wetland hydrology present?	Yes		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecedent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork.

VEGETATION - Use scientific names of plants

Tree Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Cornus alba*	10	Yes	FacW
2				
3				
4				
5				
6				
7				
8				
9				
10				
		10	= Total Cover	

Herb Stratum	Plot Size (78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Phalaris arundinacea*	100	Yes	FacW
2	*Boehmeria cylindrica*	15	No	Obl
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
		115	= Total Cover	

Woody Vine Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		0	= Total Cover	

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	2	5
Herb Stratum	23	58
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet
Total % Cover of:

OBL species	15	x 1 =	15	
FACW species	110	x 2 =	220	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column totals	125	(A)	235	(B)

Prevalence Index = B/A = 1.88

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Yes

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in an open grassy area.

SOIL

Sampling Point: 1A

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*	Loc**	Texture	Remarks
0-19	10 YR 2/1	100	None				Silt loam	
19-26	10 YR 4/2	98	10 YR 4/6	2	C	PL	Sandy clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Suface (A11)
- X Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR R, MLRA 149B)**
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils*:

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- Coast Prairie Redox (A16) **(LRR K, L, R)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Dark Surface (S7) **(LRR K, L**
- Polyvalue Below Surface (S8) **(LRR K, L)**
- Thin Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): None
Type:
Depth (inches):

Hydric soil present? Yes

Remarks:

HYDROLOGY

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)
- Marl Deposits (B15)
- 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)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	No	X	Depth (inches):	
Water table present?	Yes	No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	No	X	Depth (inches):	

Wetland hydrology present? Yes

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
The plot met the criteria of Geomorphic Position since it occupied the bottom of a depression where prolonged saturation or inundation would be likely.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Owner: Don Leitner State: WI Sampling Point: 1B
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/Toeslope Local relief (concave, convex, none): None
Slope (%): 0 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 16N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: T3/S3K
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil , or hydrology naturally problematic? No Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Yes	Is the sampled area within a wetland?	Yes
Hydric soil present?	Yes	If yes, optional wetland site ID:	
Wetland hydrology present?	Yes		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecendent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork. The vegetation was disturbed since the site was brush mowed earlier in the growing season. However this was not considered significant disturbance since it did not interfere with the investigator's ability to accurately identify plant species.

VEGETATION - Use scientific names of plants

	Tree Stratum (Plot Size: 2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Populus deltoides*	25	Yes	Fac
2				
3				
4				
5				
6				
7				
8				
9				
10				
		25	= Total Cover	

	Sapling/Shurb Stratum (Plot Size: 2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Rhamnus cathartica*	20	Yes	Fac
2	*Salix amygdaloides*	15	Yes	FacW
3	*Salix bebbiana*	10	Yes	FacW
4				
5				
6				
7				
8				
9				
10				
		45	= Total Cover	

	Herb Stratum (Plot Size: 78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Agrostis stolonifera*	60	Yes	FacW
2	*Solidago gigantea*	30	Yes	FacW
3	*Carex tribuloides*	40	Yes	FacW
4	*Boehmeria cylindrica*	20	No	Obl
5	*Eupatorium maculatum*	10	No	Obl
6	*Symphyotrichum puniceum*	10	No	Obl
7	*Acer negundo*	10	No	Fac
8	*Lonicera X bella*	10	No	FacU
9	*Cornus alba*	5	No	FacW
10	*Symphyotrichum lateriflorum*	5	No	Fac
11	*Mentha arvensis*	5	No	FacW
12				
		205	= Total Cover	

	Woody Vine Stratum (Plot Size: 2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		0	= Total Cover	

	20%	50%
Tree Stratum	5	13
Sapling/Shrub Stratum	9	23
Herb Stratum	41	103
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet

Total % Cover of:				
OBL species	40	x 1 =	40	
FACW species	165	x 2 =	330	
FAC species	60	x 3 =	180	
FACU species	10	x 4 =	40	
UPL species		x 5 =	0	
Column totals	275	(A)	590	(B)

Prevalence Index = B/A = 2.14545455

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Yes

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in a partially wooded area with a grassy, herbaceous ground layer. The surrounding area was brush-mowed recently, it was a red osier dogwood/buckthorn thicket before mowing. There was much disturbed soil and tire ruts from equipment working on wet ground.

SOIL

Sampling Point: 1B

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*	Loc**	Texture	Remarks
0-21	10 YR 2/1	100	None				Silt loam	
21-27	2.5 Y 6/2	99	10 YR 4/6	1	C	PL	Silty clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Suface (A11)
- X Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR R, MLRA 149B)**
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils*:

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- Coast Prairie Redox (A16) **(LRR K, L, R)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Dark Surface (S7) **(LRR K, L**
- Polyvalue Below Surface (S8) **(LRR K, L)**
- Thin Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): None
Type:
Depth (inches):

Hydric soil present? Yes

Remarks:

HYDROLOGY

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)
- Marl Deposits (B15)
- 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)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	No	X	Depth (inches):
Water table present?	Yes	No	X	Depth (inches):
Saturation present? (includes capillary fringe)	Yes	No	X	Depth (inches):

Wetland hydrology present? Yes

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
The plot met the criteria of Geomorphic Position since it occupied the bottom of a depression where prolonged saturation or inundation would be likely. There were many deep tire ruts in the surrounding area, indicating wet soil conditions earlier in the growing season when the site was brush mowed.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Owner: Don Leitner State: WI Sampling Point: 1C
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/Footslope Local relief (concave, convex, none): Convex
Slope (%): 1 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 16N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil , or hydrology naturally problematic? No Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	No	Is the sampled area within a wetland?	No
Hydric soil present?	No	If yes, optional wetland site ID:	
Wetland hydrology present?	No		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecendent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork. The vegetation was disturbed since the site was brush mowed earlier in the growing season. However this was not considered significant disturbance since it did not interfere with the investigator's ability to accurately identify plant species.

VEGETATION - Use scientific names of plants

	Tree Stratum (Plot Size: 2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Prunus serotina*	20	Yes	FacU
2				
3				
4				
5				
6				
7				
8				
9				
10				
		20	= Total Cover	

	Sapling/Shurb Stratum (Plot Size: 2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer negundo*	40	Yes	Fac
2	*Rhamnus cathartica*	30	Yes	Fac
3				
4				
5				
6				
7				
8				
9				
10				
		70	= Total Cover	

	Herb Stratum (Plot Size: 78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Lonicera X bella*	40	Yes	FacU
2	*Circaea canadensis*	10	No	FacU
3	*Arctium minus*	5	No	FacU
4	*Barbarea vulgaris*	5	No	Fac
5	*Geum canadense*	5	No	Fac
6	*Hackelia virginiana*	5	No	FacU
7	*Vitis riparia*	5	No	Fac
8				
9				
10				
11				
12				
		75	= Total Cover	

	Woody Vine Stratum (Plot Size: 2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		0	= Total Cover	

	20%	50%
Tree Stratum	4	10
Sapling/Shrub Stratum	14	35
Herb Stratum	15	38
Woody Vine Stratum	0	0

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% (A/B)

Prevalence Index Worksheet

Total % Cover of:			
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	85	x 3 =	255
FACU species	80	x 4 =	320
UPL species		x 5 =	0
Column totals	165	(A)	575 (B)

Prevalence Index = B/A = 3.48484848

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? No

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in a partially wooded area with a brushy understory and a sparse herbaceous ground layer. The area was brush mowed recently and there were many re-sprouting honeysuckle shrubs.

SOIL

Sampling Point: 1C

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*	Loc**	Texture	Remarks
0-19	10 YR 3/2	100	None				Silt loam	
19-25	10 YR 3/2	98	10 YR 4/6	2	C	PL	Silty clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Suface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR R, MLRA 149B)**
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils*:

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- Coast Prairie Redox (A16) **(LRR K, L, R)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Dark Surface (S7) **(LRR K, L**
- Polyvalue Below Surface (S8) **(LRR K, L)**
- Thin Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): None
Type:
Depth (inches):

Hydric soil present? No

Remarks:
No hydric indicators.

HYDROLOGY

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)
- Marl Deposits (B15)
- 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)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):
Water table present?	Yes		No	X	Depth (inches):
Saturation present? (includes capillary fringe)	Yes		No	X	Depth (inches):

Wetland hydrology present? No

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
No hydrology indicators. The plot occupied a relatively high area, well elevated above nearby wetland plots 1A & 1B. Water would not be likely to linger here for long periods.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Owner: Don Leitner State: WI Sampling Point: 1D
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/Footslope Local relief (concave, convex, none): None
Slope (%): 1 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 16N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: T3/S3K
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil , or hydrology naturally problematic? No Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Yes	Is the sampled area within a wetland?	No
Hydric soil present?	No	If yes, optional wetland site ID:	
Wetland hydrology present?	No		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecedent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork. The vegetation was disturbed since the site was brush mowed earlier in the growing season. However this was not considered significant disturbance since it did not interfere with the investigator's ability to accurately identify plant species.

VEGETATION - Use scientific names of plants

Tree Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer negundo*	40	Yes	Fac
2				
3				
4				
5				
6				
7				
8				
9				
10				
		40	= Total Cover	

Sapling/Shurb Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer negundo*	40	Yes	Fac
2				
3				
4				
5				
6				
7				
8				
9				
10				
		40	= Total Cover	

Herb Stratum	Plot Size (78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Glechoma hederacea*	60	Yes	FacU
2	*Solidago gigantea*	20	Yes	FacW
3	*Rubus occidentalis*	10	No	Upl
4	*Cornus alba*	10	No	FacW
5	*Lonicera X bella*	15	Yes	FacU
6	*Barbarea vulgaris*	10	No	Fac
7	*Carex tribuloides*	10	No	FacW
8	*Torilis japonica*	10	No	Upl
9	*Rhamnus cathartica*	5	No	Fac
10	*Circaea canadensis*	5	No	FacU
11	*Pilia pumila*	5	No	FacW
12	*Phalaris arundinacea*	10	No	FacW
		170	= Total Cover	

Woody Vine Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		0	= Total Cover	

	20%	50%
Tree Stratum	8	20
Sapling/Shrub Stratum	8	20
Herb Stratum	34	85
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 60% (A/B)

Prevalence Index Worksheet

Total % Cover of:				
OBL species		x 1 =	0	
FACW species	55	x 2 =	110	
FAC species	95	x 3 =	285	
FACU species	80	x 4 =	320	
UPL species	20	x 5 =	100	
Column totals	250	(A)	815	(B)
Prevalence Index = B/A =			3.26	

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Yes

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in a partially wooded area area with a sparse herbaceous understory. The area was brush mowed recently and there were many re-sprouting honeysuckle shrubs. Although the site was dominated by hydrophytic vegetation, the absence of hydric soil indicators and wetland hydrology indicators, as well as the presence of upland plant populations, strongly suggested this site could support dominance by upland vegetation. Also note the P-index was >3 and the FAC-Neutral Test was not met.

SOIL

Sampling Point: 1D

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*	Loc**	Texture	Remarks
0-11	10 YR 3/2	100	None				Silt loam	
11-19	10 YR 2/2	100	None				Silt loam	
19-25	10 YR 3/2	95	10 YR 4/6	5	C	PL	Silty clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**
- Stratified Layers (A5)
- Depleted Below Dark Suface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (**LRR R, MLRA 149B**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils*:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
- Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Dark Surface (S7) (**LRR K, L**
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): None
Type:
Depth (inches):

Hydric soil present? No

Remarks:
No hydric indicators.

HYDROLOGY

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)
- Marl Deposits (B15)
- 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)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):
Water table present?	Yes		No	X	Depth (inches):
Saturation present? (includes capillary fringe)	Yes		No	X	Depth (inches):

Wetland hydrology present? No

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
No hydrology indicators. The plot occupied a relatively high area, well elevated above nearby wetland plots 1A & 1B. Water would not be likely to linger here for long periods.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Own Don Leitner State: WI Sampling Point: 2A
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/Toeslope Local relief (concave, convex, none): Concave
Slope (%): 0 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 15N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: T3/S3K
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil X , or hydrology naturally problematic? Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Yes	Is the sampled area within a wetland?	Yes
Hydric soil present?	Yes	If yes, optional wetland site ID:	
Wetland hydrology present?	Yes		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecendent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork. The soil was naturally problematic since it was judged hydric even though no hydric indicators were observed.

VEGETATION - Use scientific names of plants

	Tree Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer saccharinum*		50	Yes	FacW
2					
3					
4					
5					
6					
7					
8					
9					
10					
			50	= Total Cover	

	Sapling/Shurb Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer negundo*		10	Yes	Fac
2					
3					
4					
5					
6					
7					
8					
9					
10					
			10	= Total Cover	

	Herb Stratum	Plot Size (78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Phalaris arundinacea*		60	Yes	FacW
2	*Carex tribuloides*		20	Yes	FacW
3	*Solidago gigantea*		20	Yes	FacW
4	*Typha latifolia*		10	No	Obl
5	*Boehmeria cylindrica*		10	No	Obl
6	*Carex stricta*		10	No	Obl
7	*Mimulus ringens*		5	No	Obl
8	*Acer saccharinum*		5	No	FacW
9					
10					
11					
12					
			140	= Total Cover	

	Woody Vine Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Echinocystis lobata*		5	Yes	FacW
2					
3					
4					
5					
			5	= Total Cover	

	20%	50%
Tree Stratum	10	25
Sapling/Shrub Stratum	2	5
Herb Stratum	28	70
Woody Vine Stratum	1	3

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet

Total % Cover of:			
OBL species	35	x 1 =	35
FACW species	160	x 2 =	320
FAC species	10	x 3 =	30
FACU species		x 4 =	0
UPL species		x 5 =	0
Column totals	205	(A)	385 (B)

Prevalence Index = B/A = 1.87804878

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Yes

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in a partially wooded area with a grassy understory.

SOIL

Sampling Point: 2A

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*	Loc**	Texture	Remarks
0-3	10 YR 2/2	100	None				Silt loam	many rocks
3-13	10 YR 3/3	100	None				Silty clay loam	many rocks
13-24	10 YR 2/1	98	10 YR 4/6	2	C	PL	Silt loam	many rocks

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Suface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR R, MLRA 149B)**
- Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- Thin Dark Surface (S9) **(LRR R, MLRA 149B**
- Loamy Mucky Mineral (F1) **(LRR K, L)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils*:

- 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
- Coast Prairie Redox (A16) **(LRR K, L, R)**
- 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- Dark Surface (S7) **(LRR K, L**
- Polyvalue Below Surface (S8) **(LRR K, L)**
- Thin Dark Surface (S9) **(LRR K, L)**
- Iron-Manganese Masses (F12) **(LRR K, L, R)**
- Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): None
Type:
Depth (inches):

Hydric soil present? Yes

Remarks:
No hydric indicators were observed however professional judgement was used to assume the soil was hydric based on vegetation and landscape position indicators. The black layer at the bottom of the profile may have been the original surface layer. The material above the bottom horizon may have been fill placed here in the distanct past.

HYDROLOGY

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
- X Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- 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)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):
Water table present?	Yes		No	X	Depth (inches):
Saturation present? (includes capillary fringe)	Yes		No	X	Depth (inches):

Wetland hydrology present? Yes

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
The plot met the criteria of Geomorphic Position since it occupied the bottom of a depression where prolonged saturation or inundation would be likely.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Owner: Don Leitner State: WI Sampling Point: 2B
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/ Footslope Local relief (concave, convex, none): Convex
Slope (%): 1 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 16N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: T3/S3K
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil , or hydrology naturally problematic? No Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	No	Is the sampled area within a wetland?	No
Hydric soil present?	No	If yes, optional wetland site ID:	
Wetland hydrology present?	No		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecedent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork.

VEGETATION - Use scientific names of plants

	Tree Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer saccharinum*		30	Yes	FacW
2					
3					
4					
5					
6					
7					
8					
9					
10					
			30	= Total Cover	

	Sapling/Shurb Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Rhus hirta*		60	Yes	Upl
2	*Lonicera X bella*		30	Yes	FacU
3	*Rhamnus cathartica*		20	No	Fac
4	*Cornus alba*		10	No	FacW
5	*Rosa multiflora*		10	No	FacU
6	*Salix discolor*		10	No	FacW
7					
8					
9					
10					
			140	= Total Cover	

	Herb Stratum	Plot Size (78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Phalaris arundinacea*		50	Yes	FacW
2	*Glechoma hederacea*		40	Yes	FacU
3	*Boehmeria cylindrica*		20	No	Obl
4	*Morus alba*		10	No	FacU
5	*Galium triflorum*		10	No	FacU
6	*Asclepias syriaca*		5	No	Upl
7	*Hackelia virginiana*		5	No	FacU
8					
9					
10					
11					
12					
			140	= Total Cover	

	Woody Vine Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1					
2					
3					
4					
5					
			0	= Total Cover	

	20%	50%
Tree Stratum	6	15
Sapling/Shrub Stratum	28	70
Herb Stratum	28	70
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40% (A/B)

Prevalence Index Worksheet

Total % Cover of:				
OBL species	20	x 1 =	20	
FACW species	100	x 2 =	200	
FAC species	20	x 3 =	60	
FACU species	105	x 4 =	420	
UPL species	65	x 5 =	325	
Column totals	310	(A)	1025	(B)
Prevalence Index = B/A =			3.30645161	

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? No

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in a shrub thicket with a grassy ground layer.

SOIL

Sampling Point: 2B

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*	Loc**	Texture	Remarks
0-3	10 YR 3/2	100	None				Silt loam	
3-18	10 YR 3/3	98	10 YR 4/6	2	C	PL	Silt loam	
18-24	10 YR 3/2	98	10 YR 4/6	2	C	PL	Silt loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Suface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (**LRR R, MLRA 149B**)
- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils*:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
- Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Dark Surface (S7) (**LRR K, L**
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): None
Type:
Depth (inches):

Hydric soil present? No

Remarks:
No hydric indicators. The unusual sequence of soil colors suggest past disturbance. There were rugged surface contours in the surrounding area, suggesting placement of fill in the distant past. The chroma was too high and the redox concentrations were too few in the middle horizon to meet the criteria of a hydric soil indicator.

HYDROLOGY

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)
- Marl Deposits (B15)
- 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)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):
Water table present?	Yes		No	X	Depth (inches):
Saturation present? (includes capillary fringe)	Yes		No	X	Depth (inches):

Wetland hydrology present? No

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
No hydrology indicators. The plot occupied a relatively high area, well elevated above nearby wetland plot 2A. Water would not be likely to linger here for long periods.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Own(Don Leitner State: WI Sampling Point: 2C
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/Footslope Local relief (concave, convex, none): Convex
Slope (%): 1 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 16N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil , or hydrology naturally problematic? No Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Yes	Is the sampled area within a wetland?	No
Hydric soil present?	No	If yes, optional wetland site ID:	
Wetland hydrology present?	No		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecendent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork.

VEGETATION - Use scientific names of plants

	Tree Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer saccharinum*		35	Yes	FacW
2	*Populus deltoides*		20	Yes	Fac
3	*Acer negundo*		20	Yes	Fac
4	*Prunus serotina*		20	Yes	FacU
5					
6					
7					
8					
9					
10					
			95	= Total Cover	

	Sapling/Shurb Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Rhamnus cathartica*		60	Yes	Fac
2	*Acer negundo*		30	Yes	Fac
3	*Lonicera X bella*		20	No	FacU
4					
5					
6					
7					
8					
9					
10					
			110	= Total Cover	

	Herb Stratum	Plot Size (78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Glechoma hederacea*		30	Yes	FacU
2	*Parthenocissus quinquefolia*		20	Yes	FacU
3	*Arctium minus*		15	Yes	FacU
4	*Phalaris arundinacea*		10	No	FacW
5	*Hackelia virginiana*		10	No	FacU
6	*Rubus occidentalis*		10	No	Upl
7	*Viola sp.*		10	No	Upl
8	*Geum canadense*		5	No	Fac
9	*Torilis japonica*		5	No	Upl
10					
11					
12					
			115	= Total Cover	

	Woody Vine Stratum	Plot Size (2,826 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1					
2					
3					
4					
5					
			0	= Total Cover	

	20%	50%
Tree Stratum	19	48
Sapling/Shrub Stratum	22	55
Herb Stratum	23	58
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 9 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 56% (A/B)

Prevalence Index Worksheet

Total % Cover of:				
OBL species		x 1 =	0	
FACW species	45	x 2 =	90	
FAC species	135	x 3 =	405	
FACU species	115	x 4 =	460	
UPL species	25	x 5 =	125	
Column totals	320	(A)	1080	(B)
Prevalence Index = B/A =			3.375	

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Yes

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in a wooded, brushy area area. Although the site was dominated by hydrophytic vegetation, the absence of hydric soil indicators and wetland hydrology indicators, as well as the presence of upland plant populations, strongly suggested this site could support dominance by upland vegetation. Also note the P-index was >3 and the FAC-Neutral Test was not met.

SOIL

Sampling Point: 2C

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*	Loc**	Texture	Remarks
0-13	10 YR 3/3	100	None				Silt loam	
13-15	10 YR 3/2	100	None				Silt loam	
15-24	10 YR 4/4	100	None				Silty clay loam	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**
- Stratified Layers (A5)
- Depleted Below Dark Suface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (**LRR R, MLRA 149B**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils*:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
- Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Dark Surface (S7) (**LRR K, L**
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): None
Type:
Depth (inches):

Hydric soil present? No

Remarks:
No hydric indicators.

HYDROLOGY

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)
- Marl Deposits (B15)
- 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)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):
Water table present?	Yes		No	X	Depth (inches):
Saturation present? (includes capillary fringe)	Yes		No	X	Depth (inches):

Wetland hydrology present? No

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
No hydrology indicators. The plot occupied a relatively high area, well elevated above nearby wetland plot 2A. Water would not be likely to linger here for long periods.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Leitner Property City/County: Pleasant Springs, Dane Co. Sampling Date: 8/7/15
Applicant/Owner: Don Leitner State: WI Sampling Point: 3
Investigator(s): Scott Taylor Section, Township, Range: Section 28 (NWNW), T6N, R11E
Landform (hillslope, terrace, etc.): Lake Plain/Toeslope Local relief (concave, convex, none): Concave
Slope (%): 0 Lat.: 42.960333 N Long.: 89.207994 W Datum: UTM 16N
Soil Map Unit Name: Waucousta silty clay loam (Wa) WWI Classification: T3/S3K
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? No
Are vegetation , soil X , or hydrology naturally problematic? Are "normal circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Yes	Is the sampled area within a wetland?	Yes
Hydric soil present?	Yes	If yes, optional wetland site ID:	
Wetland hydrology present?	Yes		

Remarks: (Explain alternative procedures here or in a separate report.)
Using the Natural Resource Conservation Service weighted-month method, antecendent moisture, based on total precipitation for the previous 3 months (May-Wet; June-Normal; July-Normal; Stoughton, WI weather station), was found to be above average. No precipitation was recorded at the Stoughton weather station in the 6 days of August preceding the fieldwork. The soil was naturally problematic since it was judged hydric even though no hydric indicators were observed.

VEGETATION - Use scientific names of plants

	Tree Stratum	Plot Size (314 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Populus deltoides*		60	Yes	Fac
2	*Acer saccharinum*		30	Yes	FacW
3	*Acer negundo*		20	No	Fac
4					
5					
6					
7					
8					
9					
10					
			110	= Total Cover	

	Sapling/Shurb Stratum	Plot Size (314 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Acer saccharinum*		20	Yes	FacW
2	*Acer negundo*		20	Yes	Fac
3	*Morus alba*		5	No	FacU
4					
5					
6					
7					
8					
9					
10					
			45	= Total Cover	

	Herb Stratum	Plot Size (78.5 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1	*Vitis riparia*		2	No	Fac
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
			2	= Total Cover	

	Woody Vine Stratum	Plot Size (314 sf)	Absolute % Cover	Dominant Species	Indicator Staus
1					
2					
3					
4					
5					
			0	= Total Cover	

	20%	50%
Tree Stratum	22	55
Sapling/Shrub Stratum	9	23
Herb Stratum	0	1
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet

Total % Cover of:				
OBL species		x 1 =	0	
FACW species	50	x 2 =	100	
FAC species	102	x 3 =	306	
FACU species	5	x 4 =	20	
UPL species		x 5 =	0	
Column totals	157	(A)	426	(B)
Prevalence Index = B/A =			2.7133758	

Hydrophytic Vegetation Indicators:
- Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- Prevalence index is ≤3.0*
- Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Yes

Remarks: (Include photo numbers here or on a separate sheet)
The plot was in a wooded area with a near-bare understory, probably due to a combination of heavy shade and prolonged ponding of water. The grapes (Vitis riparia) in the herb layer were not considered dominant since their cover value was less than 5%.