## **EXHIBIT 10**

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: West Bend Downtown Riverwalk Rend Applicant/Owner: Investigator(s): Jennifer Dietl and Zofia Noe; SEWF	ovation City/County: Ci		County State: <u>WI</u>	Sampling Date: 10/09/2014 Sampling Point: 1
Landform (hillslope, terrace, etc.): Milwaukee River Subregion (LRR or MLRA): LRR K	Lo	cal relief (concave, convex, no		Slope (%):
Soil Map Unit Name: Water (W)				ssification: none
Are climatic/hydrologic conditions on the site typical		Yes ☐ No ☒ (If no		2.4
Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology		Are "Normal Circumstanc (If, needed, explain any a		No □
SUMMARY OF FINDINGS – Attach site			the same of the same of the same of	int features, etc.
	map on our mg sam.	I .		
Hydrophytic Vegetation Present?   Hydric Soils Present?   Wetland Hydrology Present?   ✓Yes  Wetland Hydrology Present?	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
Remarks: (Explain alternative procedures here or		If yes, optional Wetland Site		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; ch	eck all that apply)		E-3.5.40	il Cracks (B6)
Surface Water (A1)		d Leaves (B9)		atterns (B10)
High Water Table (A2)				Lines (B16)
Saturation (A3)	Marl Deposits			Water Table (C2)
Water marks (B1) Sediment Deposits (B2)	The second secon	Iffide Odor (C1)	Crayfish Bu  Saturation	[40] [10] [10] [10] [10] [10] [10] [10] [1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		zospheres on Living Roots (C3		Visible on Aerial Imagery (C9) Stressed Plants (D1)
		Reduced Iron (C4)		ic Position (D2)
		Reduction in Tilled Soils (C6)		
Iron Deposits (B5)	Thin Muck St		Shallow Aq	
Inundation Visible on Aerial Imagery (B		n in Remarks)		raphic Relief (D4)
Sparsely Vegetated Concave Surface (I Field Observations:	38)		☐ FAC-Neutra	al Test (D5)
Surface Water Present? Yes ⊠ No □	Depth (inches): 8			
Water Table Present? Yes □ No □	Depth (inches):			
Saturation Present? Yes No	Depth (inches):	40.45		0 V D N D
(includes capillary fringe)	Depth (mones).	vvetiai	nd Hydrology Present	? Yes 🛛 No 🗌
Describe Recorded Data (stream gauge, monitorin	g well, aerial photos, prev	vious inspections), if available:		
Date of County is booked in the Adhers have	Misses and in and of the	- B (DO)		
Remarks: Sample is located in the Milwaukee	River and is part of th	e 11000way (DZ).		

VEGETATION - Use scientific	names of	plants.
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ree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
				Number of Dominant Species
				That are OBL, FACW, or FAC: 1 (A)
				Total Number of Dominant
				Species Across All Strata: 1(B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 100% (A/B)
				Prevalence Index worksheet:
	<u>0</u>	= Total Cov		
sapling/Shrub Stratum (Plot size: 30' radius)	2	- Total Gov	ei	Total % Cover of:         Multiply by:           OBL species         x 1 =
				FACW species x 2 =
·				
·	_			FAC species x 3 =
	_			FACU species x 4 =
			-	UPL species x 5 =
	-		_	Column Totals: (A) (B)
-	_		-	Prevalence Index = B/A =
_	_		-	Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation
	0	= Total Cov	er	☑ Dominance Test is >50%
lerb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.01
Phalaris arundinacea	2		FACW	Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
	_			☐ Problematic Hydrophytic Vegetation¹ (Explain)
	_			1
_		П		Indicators of hydric soil and wetland hydrology must     Be present, unless disturbed or problematic.
				De present, ameas distarged of presionate.
				Definitions of Vegetation Strata:
	-		$\equiv$	Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
			_	
	_		_	Sapling/shrub - Woody plants less than 3in. DBH
0	_		_	and greater than 3.28 ft (1 m) tall.
1	_	П	_	Herb - All herbaceous (non-woody) plants, regardless
2		П	_	of size, and woody plants less than 3.28 ft tall.
	2	= Total Cov	er	Woody vines - All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size: 30' radius)				height
· · · · · · · · · · · · · · · · · · ·	-		=	7
4				
				Hydrophytic
				Vegetation
	0	= Total Cov	er	Present? Yes ⊠ No □
demarks: (include photo number here or on a separate sheet. ominanted with Salix interior (FACW), Phalaris arundin				

Donth	Matrix			Redox Fea	atures					
Depth		0/ 0-1	a Vice stay		C-4/2-4	Loc <sup>2</sup>	+	nods:	Balance I	
(inches)	Color (moist)	% Cold	or (moist	1) %	Type <sup>1</sup>	Loc	- 1	exture	Remarks	
									_	
_										
			7. 9. 77.				10			
	oncentration, D=Deplet	ion, RM=Reduce	d Matrix	, MS= Masked	Sand Grains				Lining, M=Matrix	
lydric Soil			1	200000			-		ematic Hydric Soils <sup>3</sup> :	o de devi
	istosol (A1)			Polyvalue Beld		8) (LRR R,			10) (LRR K, L, MLRA 1	
	istic Epipedon (A2)		Tanks.	MLRA 14	the state of the s				Redox (A16) (LLR K, L,	
	lack Histic (A3)					R R, MLRA 149B)			eat or Peat (S3) (LLR I	K, L, R)
	ydrogen Sulfide (A4)			Loamy Mucky		LRR K, L)			(S7) (LRR K, L)	
	tratified Layers (A5)	A		Loamy Gleyed					ow Surface (S8) (LRR I	K, L)
	epleted Below Dark Su			Depleted Matr					face (S9) (LRR K, L)	
	nick Dark Surface (A12			Redox Dark S					se Masses (F12) (LRR	
	andy Mucky Mineral (S			Depleted Dark					odplain Soils (F19) (MLF	
	andy Gleyed Matrix (S4	1)		Redox Depres	sions (F8)				(TA6) (MLRA 144A, 14	(5, 149B)
	andy Redox (S5)							Red Parent M		
	tripped Matrix (S6)	En interest a table							Dark Surface (TF12)	
	ark Surface (S7) (LRR	R, MLRA 149B)					$\boxtimes$	Other (Explai	n in Remarks)	
N 22	Gritaria de la composición dela composición de la composición de la composición de la composición dela composición de la composición dela composición dela composición de la composición de la composición de la composición dela composición de la composición dela composición dela composición dela composición dela composición dela composición dela composic		41.0 4.0	49 - 161						
	Hydrophytic vegetation	n and wetland hy	drology	must be preser	nt, unless dist	irbed or problema	atic.			
	ayer (if observed):									
Type:							Hydri	c Soil Present?	Yes No [	
	(inches):		344							
Remarks: So	oils of the Milwaukee	River inundate	d with	8 inches of wa	ater, hydric l	by definition - Cr	riteria	3.		

Applicant/Owner: Investigator(s): Jennifer Diett and Zofia Nos; SEWRPC Local relief (concave, convex, none): Inge Local relief (concave, convex, none): Inge Subregion (LRR or MLRA): LRR K Long: Datum: NW classification: none Subregion (LRR or MLRA): LRR K Subregion (LRR or MLRA): Subregion (LRR or MLR	Applicant/Owner:	Applicant/Owner: Investigator(s): <u>Jennifer Dietl and Zofia</u> Landform (hillslope, terrace, etc.): <u>terra</u> Subregion (LRR or MLRA): <u>LRR K</u> Soil Map Unit Name: <u>Grays silt loam (</u>	a Noe; SEWRI	PC Se		State: WI	Sampling Date: 10/09/2019 Sampling Point: 2
Investigator(s):   Jennifer Diet and Zofia Noe: SEWRPC   Section, Township, Range: SE 1/4 Section 11, T11N, R19E   Local relief (concave, convex, none): none   Slope (%): 2-6%   Subregion (LRR or MLRA): LRRK   Lat:	Investigator(s): Jennifer Diet and Zofia Noo; SEWRPC Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex. none):none Slope (%): 2-6% Subregion (LRR or MLRA): LRR K Soil Map Unit Name: Grays silt beam (GrB) Are Vegetation, Soil or Hydrologysignificantly disturbed? Are Vegetation, Soil or Hydrologynaturally problematic? Will research, Soil or Hydrologynaturally problematic? Will research, Soil or Hydrologynaturally problematic? Will research, Soil or Hydrologynaturally problematic? Wetgetation, Soil or Hydrology	Investigator(s): <u>Jennifer Dietl and Zofia</u> Landform (hillslope, terrace, etc.): <u>terra</u> Subregion (LRR or MLRA): <u>LRR K</u> Soil Map Unit Name: <u>Grays silt loam (</u>				Committee of the commit	Sampling Fullit. Z
Local relief (concave, convex, none): none   Slope (%): 2-6%   Subregion (LRR or MLRA): LRRK   Lat:	Local relief (concave, convex, none): none   Slope (%): 2-6%   Subregion (LRR or MLRA)_LRRK   Lat:	Landform (hillslope, terrace, etc.): <u>terra</u> Subregion (LRR or MLRA): <u>LRR K</u> Soil Map Unit Name: <u>Grays silt loam (</u>			ction lownship Range, SE 1	14 Section 11 111N R	19F
Subregion (LRR or MLRA): LRR.K  Lat:	Subregion (LRR or MLRA): LRR k	Subregion (LRR or MLRA): <u>LRR K</u> Soil Map Unit Name: <u>Grays silt loam (</u>		Lo			
Are climatic hydrologic conditions on the site typical for this time of year? Are Vegetation	Are climatic/hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or Hydrology naturally disurbed? Are Vegetation Soil or Hydrology naturally disurbed? Are Vegetation Soil or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?					10	
Are Vegetation	Are Vegetation						ssification: none
Are Vegetation, Soil, or Hydrology naturally problematic? (If, needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?	Are Vegetation, Soil, or Hydrology naturally problematic? (If, needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present?						№ П
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?	SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?   Yes   SNo   Yes   No   Yes   Yes   No   Yes   Yes						140
Hydrophytic Vegetation Present?   Yes   Mo   Is the Sampled Area within a Wetland?   Yes   Mo   If yes, optional Wetland Site ID:	Hydrophytic Vegetation Present?   Yes   SNo   Hydrocopy Present?   Yes   SNo   Weltand Hydrology Present?   Yes   SNo   If yes, optional Weltand?   Yes   SNo   If yes, optional Weltand Site ID:						nt features, etc.
Hybric Soils Present?	Hybric Soils Present?	John 11 01 1 11 15 11 10 2 11	, tabii bito i	nap ottowning cam	pinig poniti roccitorio, in	2012 4 212 K 111 K 22 12	111110101111111111111111111111111111111
HYDROLOGY  Wetland Hydrology Present?   Yes   No   If yes, optional Wetland?   Yes   SMo   If yes, optional Wetland?   Yes   SMo   If yes, optional Wetland Site ID:  Remarks: (Explain alternative procedures here or in a separate report.) Below normal pracipitation for the previous 90 days.  HYDROLOGY  Wetland Hydrology Indicators:   Secondary Indicators (minimum of two respectives)   Surface Soil Cracks (B6)   Drainage Patterns (B10)   Drainage Patterns (B10)   Drainage Patterns (B10)   Drainage Patterns (B10)   Dry-Season Water Table (A2)   Aquatic Fauna (B13)   Dry-Season Water Table (B6)   Dry-Se	HYDROLOGY  Wetland Hydrology Present?	Hydrophytic Vegetation Present?	□Yes	⊠No		-	44
If yes, optional Wetland Site ID:	If yes, optional Wetland Site ID:			333137	within a Wetland?	☐ Yes	⊠No
Remarks: (Explain alternative procedures here or in a separate report.) Below normal precipitation for the previous 90 days.    HYDROLOGY   Wetland Hydrology Indicators:   Secondary Indicators (minimum of two response)   Surface Water (A1)   Water-Stained Leaves (B9)   Drainage Patterns (B10)   High Water Table (A2)   Aquatic Fauna (B13)   Moss Trim Lines (B16)   Dry-Season Water Table (C2)   Aquatic Fauna (B13)   Dry-Season Water Table (C2)   Water marks (B1)   Hydrogen Sulfide Odor (C1)   Crayfish Burrows (C8)   Sediment Deposits (B2)   Oxidized Rhizospheres on Living Roots (C3)   Saturation Visible on Aerial Imagery   Drift Deposits (B3)   Presence of Reduced Iron (C4)   Stunted or Stressed Plants (D1)   Iron Deposits (B5)   Recent Iron Reduction in Tilled Soils (C6)   Geomorphic Position (D2)   Inundation Visible on Aerial Imagery (B7)   Other (Explain in Remarks)   Microtopographic Relief (D4)   Sparsely Vegetated Concave Surface (B8)   FAC-Neutral Test (D5)   Field Observations:   Surface Water Present? Yes   No  Depth (inches):   Water Table Present? Yes   No  Water Table Recent Provided Present? Yes   No  Water Table Present? Yes	Remarks: (Explain alternative procedures here or in a separate report.) Below normal precipitation for the previous 90 days.  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Moss Trim Lines (B16)  Saturation (A3)  Marl Deposits (B15)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mator Crust (B4)  Recent Iron Reduction in Remarks)  Microtopographic Relief (D4)  Sparsely Vegetated Concave Surface (B8)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Sturated Plants (D1)  PAC-Neutral Test (D5)	Wetland Hydrology Present?	∐Yes	⊠No	174.4.100	in.	
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Table (A3)  Water Mari Deposits (B15)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water (A1)  Water Marks (B1)  Secondary Indicators (minimum of two respondence in the property of two research (B10)  Drainage Patterns (B10)  Drainage Patterns (B10)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (B2)  Stunted or Stressed Plants (D1)  Stunted or Stressed Plants (D1)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Water Table Present?  Yes Depth (inches):	HYDROLOGY  Wetland Hydrology Indicators: Secondary Indicators (minimum of two reprimary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Moss Trim Lines (B16)  Saturation (A3)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Agreace (C7)  Inundation Visible on Aerial Imagery (B7)  Presence (B8)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Secondary Indicators (minimum of two recondance (B10)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (B7)  Stunted or Stressed Plants (D1)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology Present? Yes No Experiments (D5)	Burney, Very 10th High Common way	Disease to some scale		The second secon		10
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two reductions (minimum of two reductions)         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)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imagery         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):         Water Table Present?       Yes □ No ☑ Depth (inches):	Wetland Hydrology Indicators: (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Primary Indicators (minimum of one is required; check all that apply)       Surface Water (A1)       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)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imager         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Microtopographic Relief (D4)         Sparsely Vegetated Concave Surface (B8)       FAC-Neutral Test (D5)         Field Observations:       Surface Water Present?       Yes No Superth (inches):         Saturation Present?       Yes Depth (inches):       No Superth (inches):						
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Drainage Pattems (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (A2)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Marl Deposits (B15)  Dry-Season Water Table (C2)  Water marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mat or Crust (B4)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Water Table (Pa)  Surface Soil Cracks (B6)  Drainage Pattems (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Saturation Visible on Aerial Imagery (C8)  Stunted or Stressed Plants (D1)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)	Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Drainage Patterns (B10)  Aquatic Fauna (B13)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Water marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Microtopographic Relief (D4)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Water Table Present?  Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):	HYDROLOGY					
□ 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)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imagery         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☒ Depth (inches):         Water Table Present?       Yes □ No ☒ Depth (inches):	Surface Water (A1)	Wetland Hydrology Indicators:		V . / C TV		Secondary Indica	ators (minimum of two require
☐ High Water Table (A2)       ☐ Aquatic Fauna (B13)       ☐ Moss Trim Lines (B16)         ☐ Saturation (A3)       ☐ Marl Deposits (B15)       ☐ Dry-Season Water Table (C2)         ☐ Water marks (B1)       ☐ Hydrogen Sulfide Odor (C1)       ☐ Crayfish Burrows (C8)         ☐ Sediment Deposits (B2)       ☐ Oxidized Rhizospheres on Living Roots (C3)       ☐ Saturation Visible on Aerial Imagery         ☐ Drift Deposits (B3)       ☐ Presence of Reduced Iron (C4)       ☐ Stunted or Stressed Plants (D1)         ☐ Algal Mat or Crust (B4)       ☐ Recent Iron Reduction in Tilled Soils (C6)       ☐ Geomorphic Position (D2)         ☐ Iron Deposits (B5)       ☐ Thin Muck Surface (C7)       ☐ Shallow Aquitard (D3)         ☐ Inundation Visible on Aerial Imagery (B7)       ☐ Other (Explain in Remarks)       ☐ Microtopographic Relief (D4)         ☐ Sparsely Vegetated Concave Surface (B8)       ☐ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ☐ No ☑ Depth (inches):         Water Table Present?       Yes ☐ No ☑ Depth (inches):	High Water Table (A2)	Primary Indicators (minimum of one is	s required; che	eck all that apply)		☐ Surface Soi	Cracks (B6)
□ Saturation (A3)       □ Marl Deposits (B15)       □ Dry-Season Water Table (C2)         □ Water marks (B1)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imagery         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):         Water Table Present?       Yes □ No ☑ Depth (inches):	□ Saturation (A3)       □ Marl Deposits (B15)       □ Dry-Season Water Table (C2)         □ Water marks (B1)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imager         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):       Wetland Hydrology Present?       Yes □ No ☑	☐ Surface Water (A1)		☐ Water-Staine	ed Leaves (B9)	☐ Drainage Pa	attems (B10)
□ Saturation (A3)       □ Marl Deposits (B15)       □ Dry-Season Water Table (C2)         □ Water marks (B1)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imagery         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present? Yes □ No ☑ Depth (inches):         Water Table Present? Yes □ No ☑ Depth (inches):	□ Saturation (A3)       □ Marl Deposits (B15)       □ Dry-Season Water Table (C2)         □ Water marks (B1)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imager         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):       Wetland Hydrology Present?       Yes □ No ☑			☐ Aquatic Faur	na (B13)	☐ Moss Trim I	ines (B16)
□ Water marks (B1)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imagery         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches): □         Water Table Present?       Yes □ No ☒ Depth (inches): □	□ Water marks (B1)       □ Hydrogen Sulfide Odor (C1)       □ Crayfish Burrows (C8)         □ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imager         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):       □ Wetland Hydrology Present?       Yes □ No ☑         Saturation Present?       Yes □ No ☑       Depth (inches):       □ Wetland Hydrology Present?       Yes □ No ☑			(A. C.			
□ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imagery         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):         Water Table Present?       Yes □ No ☑ Depth (inches):	□ Sediment Deposits (B2)       □ Oxidized Rhizospheres on Living Roots (C3)       □ Saturation Visible on Aerial Imager         □ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):         Water Table Present?       Yes □ No ☑ Depth (inches):         Saturation Present?       Yes □ No ☑ Depth (inches):     Wetland Hydrology Present? Yes □ No ☑ Depth (inches):						
□ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☒ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☒ Depth (inches): □         Water Table Present?       Yes □ No ☒ Depth (inches): □	□ Drift Deposits (B3)       □ Presence of Reduced Iron (C4)       □ Stunted or Stressed Plants (D1)         □ Algal Mat or Crust (B4)       □ Recent Iron Reduction in Tilled Soils (C6)       ☑ Geomorphic Position (D2)         □ Iron Deposits (B5)       □ Thin Muck Surface (C7)       □ Shallow Aquitard (D3)         □ Inundation Visible on Aerial Imagery (B7)       □ Other (Explain in Remarks)       □ Microtopographic Relief (D4)         □ Sparsely Vegetated Concave Surface (B8)       □ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes □ No ☑ Depth (inches):         Water Table Present?       Yes □ No ☑ Depth (inches):         Saturation Present?       Yes □ No ☑ Depth (inches):     Wetland Hydrology Present? Yes □ No ☑						
☐ Algal Mat or Crust (B4)       ☐ Recent Iron Reduction in Tilled Soils (C6)       ☒ Geomorphic Position (D2)         ☐ Iron Deposits (B5)       ☐ Thin Muck Surface (C7)       ☐ Shallow Aquitard (D3)         ☐ Inundation Visible on Aerial Imagery (B7)       ☐ Other (Explain in Remarks)       ☐ Microtopographic Relief (D4)         ☐ Sparsely Vegetated Concave Surface (B8)       ☐ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ☐ No ☒ Depth (inches):         Water Table Present?       Yes ☐ No ☒ Depth (inches):	☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☒ Geomorphic Position (D2)   ☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7) ☐ Shallow Aquitard (D3)   ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Microtopographic Relief (D4)   ☐ Sparsely Vegetated Concave Surface (B8) ☐ FAC-Neutral Test (D5)    Factorial Test (D5)  Water Table Present?  Yes ☐ No ☒ Depth (inches):  Saturation Present?  Yes ☐ No ☒ Depth (inches):  Wetland Hydrology Present?  Yes ☐ No ☒    Wetland Hydrology Present?  Yes ☐ No ☒						이번째 경기 가장에 보고 있다면 하다 하다.
☐ Iron Deposits (B5)       ☐ Thin Muck Surface (C7)       ☐ Shallow Aquitard (D3)         ☐ Inundation Visible on Aerial Imagery (B7)       ☐ Other (Explain in Remarks)       ☐ Microtopographic Relief (D4)         ☐ Sparsely Vegetated Concave Surface (B8)       ☐ FAC-Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ☐ No ☒ Depth (inches):         Water Table Present?       Yes ☐ No ☒ Depth (inches):	☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7) ☐ Shallow Aquitard (D3) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Microtopographic Relief (D4) ☐ Sparsely Vegetated Concave Surface (B8) ☐ FAC-Neutral Test (D5)  Field Observations:  Surface Water Present? Yes☐ No ☑ Depth (inches): ☐ Water Table Present? Yes☐ No ☑ Depth (inches): ☐ Wetland Hydrology Present? Yes☐ No ☑ Depth (inches): ☐ Wetland Hydrology Present? Yes☐ No ☑ Depth (inches): ☐ No ☑ Dept						
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Microtopographic Relief (D4) ☐ Sparsely Vegetated Concave Surface (B8) ☐ FAC-Neutral Test (D5)  Field Observations:  Surface Water Present? Yes ☐ No ☒ Depth (inches):  Water Table Present? Yes ☐ No ☒ Depth (inches):	□ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Microtopographic Relief (D4) □ Sparsely Vegetated Concave Surface (B8) □ FAC-Neutral Test (D5)  Field Observations:  Surface Water Present? Yes □ No ☑ Depth (inches): □  Water Table Present? Yes □ No ☑ Depth (inches): □  Saturation Present? Yes □ No ☑ Depth (inches): □ Wetland Hydrology Present? Yes □ No ☑						
Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes □ No ☒ Depth (inches):  Water Table Present? Yes □ No ☒ Depth (inches):	□ Sparsely Vegetated Concave Surface (B8)         □ FAC-Neutral Test (D5)           Field Observations:           Surface Water Present?         Yes □ No ☒ Depth (inches):           Water Table Present?         Yes □ No ☒ Depth (inches):           Saturation Present?         Yes □ No ☒ Depth (inches):           Wetland Hydrology Present?         Yes □ No ☒		I Imagen/ /B7				
Field Observations:  Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes Depth (inches):	Field Observations:  Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):				iii iii Reiliaiks)		
Water Table Present? Yes ☐ No ☒ Depth (inches):	Water Table Present? Yes ☐ No ☒ Depth (inches):		ive Surface (B	8)		☐ FAC-Neutra	Test (D5)
[2,192,002,001,002,001,002,002,002,002,002,00	Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches):	Surface Water Present? Yes □	No 🗵	Depth (inches):			
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present?		Water Table Present? Yes □	No 🗵	Depth (inches):			
		[ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [	No ⊠	Depth (inches):	Wetlan	nd Hydrology Present	7 Yes □ No ⊠
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gau	ge, monitoring	well, aerial photos, pre	vious inspections), if available:		
Remarks: Sample site is located in the Milwaukee River floodway (D2).		Damarke: Sample eito is located in	n the Milway	kee River floodway (I	22)		

/EGETATION	- Use scientific names of plants.
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1	tal Cover  FACU FACW FACW FAC FAC NI Tal Cover	Dominance Test worksheet:         Number of Dominant Species         That are OBL, FACW, or FAC: 0 (A)         Total Number of Dominant Species Across All Strata: 3 (B)         Percent of Dominant Species         That Are OBL, FACW, or FAC: 0% (A/B)         Prevalence Index worksheet:         Total % Cover of: Multiply by:         OBL species
2	tal Cover  FACU FACW FAC FAC NI Tal Cover	That are OBL, FACW, or FAC: 0 (A)  Total Number of Dominant Species Across All Strata: 3 (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species x1 =  FACW species x2 =  FAC species x3 =  FACU species x4 =  UPL species x5 =  Column Totals: (A) (B)  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%
3	tal Cover  FACU FACW FAC FAC NI Cover	Total Number of Dominant Species Across All Strata: 3 (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species x 1 =  FACW species x 2 =  FAC species x 3 =  FACU species x 4 =  UPL species x 5 =  Column Totals: (A) (B)  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%
4	tal Cover  FACU FACW FAC FAC FAC NI Tal Cover	Species Across All Strata:         3 (B)           Percent of Dominant Species         That Are OBL, FACW, or FAC:         0% (A/B)           Prevalence Index worksheet:
5 6 5	tal Cover  FACU FACW FAC FAC FAC NI Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species
6	tal Cover  FACU FACW FACW FAC FAC NI Tal Cover	That Are OBL, FACW, or FAC: 0% (A/B)           Prevalence Index worksheet:           Total % Cover of:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =           FAC species         x 3 =           FACU species         x 4 =           UPL species         x 5 =           Column Totals:         (A)         (B)           Prevalence Index = B/A =
7	tal Cover  FACU FACW FAC FAC FAC NI Cover	Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species
Sapling/Shrub Stratum       (Plot size: 30' radius)         1. Lonicera x bella       30         2. Ulmus americana       10         3. Fraxinus pennsylvanica       5         4. Rhamnus cathartica       5         5. Rhamnus frangula       5         6. Prunus sp.       3         7       58         Herb Stratum (Plot size: 5' radius)         1. Agropyron repens       60         2. Poa compressa       30	FACU FACW FACW FAC FAC FAC NI Tall Cover	Total % Cover of:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =           FAC species         x 3 =           FACU species         x 4 =           UPL species         x 5 =           Column Totals:         (A)         (B)           Prevalence Index = B/A =
Sapling/Shrub Stratum (Plot size: 30' radius)   1. Lonicera x bella   30   20   20   20   20   20   20   20	FACU FACW FAC FAC FAC NI MI	OBL species
1. Lonicera x bella 2. Ulmus americana 3. Fraxinus pennsylvanica 4. Rhamnus cathartica 5. Rhamnus frangula 6. Prunus sp. 7 58 = Tot Herb Stratum (Plot size: 5' radius) 1. Agropyron repens 60  2. Poa compressa 30  2. Poa compressa	FACW FACW FAC FAC NI Later Cover	FACW species
2. Ulmus americana 3. Fraxinus pennsylvanica 4. Rhamnus cathartica 5. Rhamnus frangula 6. Prunus sp. 7	FACW FACW FAC FAC NI Later Cover	FAC species
3. Fraxinus pennsylvanica 4. Rhamnus cathartica 5. Rhamnus frangula 6. Prunus sp. 7  58 = Tot  Herb Stratum (Plot size: 5' radius) 1. Agropyron repens 60  2. Poa compressa 30  30	FACW FAC FAC NI Cover	FACU species
4. Rhamnus cathartica	FAC FAC NI Later Cover	UPL species x 5 = (B)  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
5. Rhamnus frangula 6. Prunus sp. 7  58 = Tot Herb Stratum (Plot size: 5' radius) 1. Agropyron repens 60  2. Poa compressa 30  2.	FAC NI Tal Cover	Column Totals: (A) (B)  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%
6. <u>Prunus sp.</u> 7	NI NI La	Column Totals: (A) (B)  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%
7	atal Cover	Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%
7	tal Cover	☐ Rapid Test for Hydrophytic Vegetation☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)         60         ∑           1. Agropyron repens         60         ∑           2. Poa compressa         30         ∑		☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)         60         ∑           1. Agropyron repens         60         ∑           2. Poa compressa         30         ∑		
1. Agropyron repens       60       2         2. Poa compressa       30       2	FACU	Prevalence Index is ≤3.0¹
2. Poa compressa 30		☐ Morphological Adaptations¹ (Provide supporting
	FACU	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Nepeta cateria 3	1 FACU	Problematic Hydrophytic Vegetation (Explain)
3 5		1 Indicators of hydric soil and wetland hydrology must
Total Control of the		Be present, unless disturbed or problematic.
5. Asclepias syriaca 2		Definitions of Vegetation Strata:
6		Delinitions of Vegetation Strata.
7		Tree - Woody plants 3in. (7.6 cm) or more in diameter
8	1	at breast height (DBH), regardless of height
9		Sapling/shrub - Woody plants less than 3in. DBH
10	1	and greater than 3.28 ft (1 m) tall.
11, E	1	Herb - All herbaceous (non-woody) plants, regardless
12	1	of size, and woody plants less than 3.28 ft tall.
98 = Tot	al Cover	was a second of the second of
Woody Vine Stratum (Plot size: 30' radius)		Woody vines – All woody vines greater than 3,28 ft in height
1. Parthenocissus quinquefolia 3	I FACU	1,5,5
2	1 _	
3		Hydrophytic
4		Vegetation
	al Cover	Present? Yes □ No ☒
Remarks: (include photo number here or on a separate sheet.) Old field and upla		

Donth	Matrix			Redox Fea	tures				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc2	-	Texture	Remarks
0-2	10YR 4/3	100	Color (Incide)		-170		Sandy		Old fill material
2-5	1011(410	100					Gravel		Old fill material
5+							Olavai		Refusal: Gravel fill material
					$\equiv$				
	Concentration, D=Depl	etion, RM=F	Reduced Matrix, N	// //S= Masked	Sand Grains			Location: PL=Pore	
	il Indicators: Histosol (A1) Histic Epipedon (A2)		□ P	olyvalue Belo	w Surface (St	3) (LRR R,		2 cm Muck (	lematic Hydric Soils <sup>3</sup> : A10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (Sandy Gleyed Matrix (S5) Stripped Matrix (S6) Dark Surface (S7) (LRI of Hydrophytic vegetat	(2) (S1) (S4) R R, MLRA	)	pamy Mucky pamy Gleyed epleted Matri edox Dark Si epleted Dark edox Depres	x (F3) urface (F6) Surface (F7) sions (F8)	LRR K, L)		Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Expla	Peat or Peat (S3) (LLR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) esee Masses (F12) (LRR K, L, R) codplain Soils (F19) (MLRA 149B) c (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) in in Remarks)
Restrictive	e Layer (if observed):							1 0/2 (t) 10	
Type	e: th (inches):						н	ydric Soil Present	t? Yes ☐ No ☒
Remarks: (	Soils are old fill mate		pears to nave t						

WE	TLAND DET	ERMINATION DA	TA FORM - North	central and Northea	st Region
Project/Site: West Bend Dow	ntown Riverwalk	Renovation City/Count	ty: City of West Bend/Wast	hington County	Sampling Date: 10/09/2014
Applicant/Owner:				State: WI	Sampling Point: 3
Investigator(s): Jennifer Diet				ge: NE 1/4 Section 14, T11N	
Landform (hillslope, terrace, a Subregion (LRR or MLRA): L		River	Local relief (concave, con Lat: Long:	A CONTRACTOR OF THE PARTY OF TH	Slope (%): =
Soil Map Unit Name: Water (			Long.		classification: none
Are climatic/hydrologic condit		pical for this time of year	7 Yes □ No 🏻	(If no, explain in Remarks	)
Are Vegetation, Soil				umstances" present? Yes	
Are Vegetation, Soil	_, or Hydrology	naturally problema	tic? (If, needed, expla	ain any answers in Remarks.)	
SUMMARY OF FINDIN	GS - Attach s	site map showing s	sampling point locat	ions, transects, impor	tant features, etc.
	TO SET A		San		
Hydrophytic Vegetation Pres		□No	Is the Sampled Are within a Wetland?		□No
Hydric Soils Present?	⊠Yes	□No	within a wettand?	M les	
Wetland Hydrology Present	? ⊠Yes	□No	If yes, optional Wet	land Site ID:	
Remarks: (Explain alternati	ve procedures her	re or in a senarate report			lays. Sample area is located
in the Milwaukee River in	a small coolien		, , , , , , , , , , , , , , , , , , ,	, otonout visii.	
HYDROLOGY					
Wetland Hydrology Indica	tors:	UATE TO C		Secondary Inc	licators (minimum of two required)
Primary Indicators (minimun	of one is require	d; check all that apply)		☐ Surface S	Soil Cracks (B6)
Surface Water (	A1)	☐ Water-S	Stained Leaves (B9)	☐ Drainage	Patterns (B10)
☐ High Water Table	(A2)	☐ Aquatic	Fauna (B13)		n Lines (B16)
☐ Saturation (A3)	V =/		posits (B15)	The second secon	on Water Table (C2)
☐ Water marks (B1)	Š.		en Sulfide Odor (C1)		Burrows (C8)
			원 성상에 없는 그리아 시장보다.		n Visible on Aerial Imagery (C9)
- [ - ] - <del>- [ - ] </del>			d Rhizospheres on Living R		
Drift Deposits (B3	1	A STATE OF THE PARTY.	ce of Reduced Iron (C4)	All the second s	or Stressed Plants (D1)
Algal Mat or Crus			Iron Reduction in Tilled Soi		ohic Position (D2)
Iron Deposits (B5	And the second second		ick Surface (C7)		Aquitard (D3)
Inundation Visible	on Aerial Imager	y (B7)   Other (E	Explain in Remarks)	Microtopo	ographic Relief (D4)
	ed Concave Surfa	ce (B8)		☐ FAC-Neu	tral Test (D5)
Field Observations: Surface Water Present?	Vaa ⊠ No	Double (inches): 6			
		Depth (inches): 6			
Water Table Present?	Yes No				
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	-	Wetland Hydrology Prese	nt? Yes⊠ No □
Describe Recorded Data (st Remarks: Sample is locat			s, previous inspections), if a	vailable:	

VEGETATION - Use scientific r	names of plants.
-------------------------------	------------------

Number of Dominant Species	Number of Dominant Species	Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
That are OBL_FACW, or FAC: 1 (A)   1	2	t				Number of Dominant Species
1	Total Number of Dominant   Species Across All Stratus   1 (B)					
						Total Number of Dominant
	Percent of Dominant Species   That Ano OBL FACW. or FAC: 190% (A/B)					
6.		5.				Percent of Dominant Species
Prevalence Index worksheet:	Prevalence Index worksheet:   Total % Cover of: Multiply by: OBL species					
Saplino/Shrub Stratum (Plot size: 30' radius)	Q					
Saplino/Shrub Stratum (Plot size: 30' radius)	Column Totals:   Colu	(,	0			
FACW species	FACW species	Saplino/Shrub Stratum (Plot size: 30' radius)	-	Total Gov	51	
2	2	A CONTRACTOR OF THE PROPERTY O	100			
	FACU species					
Column Totals:	UPL species	2				
5	Column Totals: (A) (B) Prevalence Index = BIA =	3	_			
6.	Frevalence Index = B/A =   Hydrophytic Vegetation Indicators:   Rapid Test for Hydrophytic Vegetation Indicators:   Rapid				_	
	7		·			the state of the s
Bapid Test for Hydrophytic Vegetation   Dominance Test is 50%   Dominance Test is 50%   Prevalence Index is \$3.0"   Prevalence Index is \$3.0"   Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)   Problematic Hydrophytic Vegetation* (Explain)   Morphological 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.    Definitions of Vegetation Strata:   Definitions of Vegetation Strata:   Tree − Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height   Sapling/shrub − Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.    10	Protain Cover   Rapid Test for Hydrophytic Vegetation   Dominance Test is >50%   Prevalence Index is ≤3.0°   Prevalence Index is ≤3.0°   Prevalence Index is ≤3.0°   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   Problematic Hydrophytic Vegetation' (Explain)		-		-	
Dominance Test is >50%   Prevalence Index is ≤3.0°   Pr	Herb Stratum (Plot size: 5' radius)  1. Lemna minor  2. OBL Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation' (Explain)  1. Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  Tree — Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height  Sapling/shrub — Woody plants less than 3in. DBH and greater than 3.28 ft tall.  3. ■ Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1. □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	7	-		$\leftarrow$	
1. Lemna minor 2	Lemna minor   3		<u>0</u>	= Total Cov	er	
data in Remarks or on a separate sheet)    Composition   Composition   Composition	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.   Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.   Definitions of Vegetation Strata:   Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height   Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.   Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft in height   Herb – All woody vines greater than 3.28 ft in height   Woody vines – All woody vines greater than 3.28 ft in height   Hydrophytic Vegetation   Vege	Herb Stratum (Plot size: 5' radius)				
2.	Problematic Hydrophytic Vegetation* (Explain)   Indicators of hydric soil and wettand hydrology must Be present, unless disturbed or problematic.   Definitions of Vegetation Strata:   Definitions of Vegetation Strata:   Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height   Problematic.   Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.   Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   Woody vines – All woody vines greater than 3.28 ft in height   Hydrophytic   Vegetation   Present?   Yes   No   Remarks: (include photo number here or on a separate sheet.) Open water of the Milwaukee River. A narrow strip of rocky soils between the River and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus   Problematic Hydrophytic   Problematic Hydrophytic   Problematic Hydrophytic   Problematic Hydrophytic   Problematic Hydrophytic   Present?   Yes   No     Present?   Yes   No	1. Lemna minor	3		OBL	HEAD CONTROL THE CONTROL TO CONTROL C
3	3	2	_		_	
9	Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1					
9	Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1					
9	Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1					be present, unless disturbed or problematic.
9	Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1	0	_			Definitions of Vegetation Strata:
9	Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1	6	_			
9	Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1	7				
10 and greater than 3.28 ft (1 m) tall.  11	and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1		-		_	at breast neight (DBH), regardless of height
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  3 = Total Cover  Woody Vine Stratum (Plot size: 30' radius)  1		-	Ш	_	
12	12	10			_	and greater than 3.28 ft (1 m) tall.
12:	of size, and woody plants less than 3.28 ft tall.    Stratum (Plot size: 30' radius)	11				Herb - All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30' radius)  1	Woody Vine Stratum (Plot size: 30' radius)  1	12	-		-	
Woody Vine Stratum (Plot size: 30' radius)  1	Woody Vine Stratum (Plot size: 30' radius)  1		3	= Total Cove	er	
1	1	Woody Vine Stratum (Plot size: 30' radius)				
2	2					neight
3 Hydrophytic 4 0 = Total Cover  Remarks: (include photo number here or on a separate sheet.) Open water of the Milwaukee River. A narrow strip of rocky soils between the River and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	A	3				
4	4 □ Vegetation Present? Yes ☑ No □  Remarks: (include photo number here or on a separate sheet.) Open water of the Milwaukee River. A narrow strip of rocky soils between the River and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	2	_			A
0 = Total Cover  Present? Yes ☑ No ☐  Remarks: (include photo number here or on a separate sheet.) Open water of the Milwaukee River. A narrow strip of rocky soils between the River and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	© = Total Cover  Present? Yes ⊠ No □  Remarks: (include photo number here or on a separate sheet.) Open water of the Milwaukee River. A narrow strip of rocky soils between the River and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	·				
Remarks: (include photo number here or on a separate sheet.) Open water of the Milwaukee River. A narrow strip of rocky soils between the River and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	Remarks: (include photo number here or on a separate sheet.) Open water of the Milwaukee River. A narrow strip of rocky soils between the River and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	4	0		-	
and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	and concrete/rock wall is dominanted with Phalaris arundinacea (FACW), Vitis riparia (FAC), Rhamnus cathartica (FAC), and Rhamnus	Remarks: (include photo number here or on a senarate				A narrow strip of rocky soils between the River

10.0	cription: (Describe to the			Redox Fea	- M - 1 - 1 - 1 - 1 - 1			
Depth		0/ Calant			W-1	Loc <sup>2</sup>	Tankon	Remarks
(inches)	Color (moist)	% Color (	moist)	%	Type <sup>1</sup>	Loc	Texture	Remarks
Type: C=C	Concentration, D=Depletion	RM=Reduced N	Matrix	MS= Masked S	Sand Grains		2 ocation: PI =Po	re Lining, M=Matrix
	Indicators:	i, Rivi-Reduced I	viatrix,	IVIO- IVIASKED S	Daniu Grains			blematic Hydric Soils <sup>3</sup> ;
	Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surfa Thick Dark Surface (A12) Bandy Mucky Mineral (S1) Bandy Gleyed Matrix (S4) Bandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R)	MLRA 149B)	00000	Loamy Mucky I Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	Mineral (F1) (I Matrix (F2) x (F3) urface (F6) Surface (F7) sions (F8)		☐ Dark Surface ☐ Polyvalue E ☐ Thin Dark S ☐ Iron-Manga ☐ Piedmont F ☐ Mesic Spoo ☐ Red Parent ☐ Very Shallo ☑ Other (Exp	y Peat or Peat (S3) (LLR K, L, R) ce (S7) (LRR K, L) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) Innese Masses (F12) (LRR K, L, R) Illoodplain Soils (F19) (MLRA 149B) Idic (TA6) (MLRA 144A, 145, 149B) Material (F21) In Dark Surface (TF12) Idin in Remarks)
	of Hydrophytic vegetation a	and wetland hydro	ology n	nust be presen	t, unless distu	rbed or problema	atic.	
Restrictive	Layer (if observed):							-y
Type:							Hydric Soil Preser	nt? Yes⊠ No □
	(inches): and and rocky bottom :							

WE	TLAND DETERM	MINATION DATA	FORM - Northce	entral and Northea	ast Region				
Project/Site: West Bend Dow	ntown Riverwalk Renov	vation City/County: C	ity of West Bend/Washir	ngton County	Sampling Date: 10/09/2014				
Applicant/Owner:				State: WI	Sampling Point: 4				
Investigator(s): Jennifer Dietl			Section, Township, Range: NW 1/4 Section 13, T11n, R19E						
Landform (hillslope, terrace, e			cal relief (concave, conv		Slope (%): =				
Subregion (LRR or MLRA): LI		La	t: Long: _	Datum:	4 14 14 14 15				
Soil Map Unit Name: Water (		Cara Miller Manage and Contraction	Van D. Na D.		classification: none				
Are climatic/hydrologic conditi Are Vegetation, Soil				(If no, explain in Remark	V				
Are Vegetation, Soil				nstances" present? Yes any answers in Remarks					
A RESTORATE A PROPERTY.									
SUMMARY OF FINDIN	55 - Attach site i	nap snowing sam	pling point locatio	ons, transects, impo	rtant features, etc.				
Understands Vandation Desi		ETM:	Is the Sampled Area						
Hydrophytic Vegetation Pres Hydric Soils Present?	sent?   Yes  Yes	□No □No	within a Wetland?	⊠ Yes	□No				
Wetland Hydrology Present		□No	13410-02 30 10 POSS	-	100				
Treating Tryatology Treating	2105	L110	If yes, optional Wetlan	nd Site ID:					
Remarks: (Explain alternation	ve procedures here or i	n a separate report.) Be			days. Sample area located on				
the edge of the Milwauke	o ravor diacriae boo	TO COLONIA CONTRACTOR OF THE COLONIA COLON	nee and up tap dising	and shirtening.					
HYDROLOGY									
Wetland Hydrology Indicat	ors:	THE COLUMN		Secondary Ir	ndicators (minimum of two required)				
Primary Indicators (minimum	of one is required; che	eck all that apply)		☐ Surface	Soil Cracks (B6)				
Surface Water (A	11)	☐ Water-Staine	ed Leaves (B9)		e Patterns (B10)				
	1.4.4								
	(AZ)	Aquatic Faur			rim Lines (B16)				
Saturation (A3)		Marl Deposit	s (B15)		son Water Table (C2)				
Water marks (B1)	)	☐ Hydrogen Su	ılfide Odor (C1)	☐ Crayfish	Burrows (C8)				
Sediment Deposit	s (B2)	Oxidized Rhi	zospheres on Living Roo	ots (C3)   Saturati	on Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3	)	☐ Presence of	Reduced Iron (C4)	☐ Stunted	or Stressed Plants (D1)				
☐ Algal Mat or Crus	(B4)		Reduction in Tilled Soils	(C6) 🛛 Geomo	rphic Position (D2)				
☐ Iron Deposits (B5		☐ Thin Muck S			Aquitard (D3)				
	The factor of the second								
	on Aerial Imagery (B7)		in in Remarks)		pographic Relief (D4)				
☐ Sparsely Vegetate Field Observations:	ed Concave Surface (B	8)		⊠ FAC-Ne	outral Test (D5)				
Surface Water Present?	Yes⊠ No □	Depth (inches): 10							
Water Table Present?	Yes No 🗆	Depth (inches):							
Saturation Present?	Yes □ No □	Depth (inches):		Wetland Hydrology Pres	ent? Yes⊠ No □				
(includes capillary fringe)				Trottana Tryanology Troc	140 24 110 25				
Describe Recorded Data (str	eam gauge, monitoring	well, aerial photos, pre-	vious inspections), if ava	ailable:					
Remarks: Sample area is	located in the Milway	ukee River floodway							
Nomana. Sample area to	located in the minwat	ando ravor noodway.							

-			-
Samp	ina	Point.	л
Samo	mu	F OILL	4

Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Cover	□ □	Status	Number of Dominant Species
			That are OBL, FACW, or FAC: 1 (A)
		_	
		-	Total Number of Dominant Species Across All Strata: 1 (B)
		-	
			Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
_		_	Harry Control School Of the Property of the Party of the
-		_	Prevalence Index worksheet:
0	= Total Cove	r	Total % Cover of: Multiply by:
			OBL species x 1 =
3		FACW	FACW species x 2 =
		_	FAC species x3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
3			Rapid Test for Hydrophytic Vegetation
5	= Total Cove	į.	Dominance Test is >50%     Prevalence Index is ≤3.0¹
70	M	FACW	☐ Morphological Adaptations¹ (Provide supporting
			data in Remarks or on a separate sheet)
			☐ Problematic Hydrophytic Vegetation¹ (Explain)
2		FAC	1 Indicators of hydric soil and wetland hydrology must
		-	Be present, unless disturbed or problematic.
		_	Definitions of Vegetation Strata:
			Tree – Woody plants 3in. (7.6 cm) or more in diameter
			at breast height (DBH), regardless of height
			Sapling/shrub – Woody plants less than 3in. DBH
			and greater than 3.28 ft (1 m) tall.
			A TO A STATE OF THE STATE OF TH
	100		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
74		_	of size, and woody plants less than 5.25 it tail.
14	- Total Cove	i.	Woody vines - All woody vines greater than 3.28 ft in
	П		height
		_	
_	16.0	_	
_		$\overline{}$	Hydrophytic
		-	Vegetation   Present?   Yes ⊠ No □
0	= Total Cove		
	<u>3</u> <u>70</u> <u>2</u> <u>2</u> <u>1</u>	3	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

Depth	Matrix			Redox Feat	ures			
(inches)	Color (moist)	% Colo	r (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	oncentration, D=Depletic	on, RM=Reduce	d Matrix,	MS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix lematic Hydric Soils³:
H H B H S D T S S S S D D	listosol (A1) listic Epipedon (A2) listic Epipedon (A2) listic Histic (A3) lydrogen Sulfide (A4) lydrogen Sulfide (A4) lydrogen Sulfide (A5) lepleted Below Dark Surf hick Dark Surface (A12) landy Mucky Mineral (S1 landy Gleyed Matrix (S4) landy Redox (S5) ltripped Matrix (S6) lark Surface (S7) (LRR F	) R, MLRA 149B)	000000	Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress	B) ace (S9) (LRR Mineral (F1) (I Matrix (F2) c (F3) rface (F6) Surface (F7) sions (F8)	R, MLRA 149B RR K, L)	Coast Prairie  Coast Prairie  Som Mucky  Dark Surface  Polyvalue Be  Thin Dark Su  Iron-Mangan  Piedmont Flo  Mesic Spodio  Red Parent N  Very Shallow  Other (Explain	A10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R) Peat or Peat (S3) (LLR K, L, R) Re(S7) (LRR K, L) Relow Surface (S8) (LRR K, L) Unface (S9) (LRR K, L) Rese Masses (F12) (LRR K, L, R) Redodplain Soils (F19) (MLRA 149B C (TA6) (MLRA 144A, 145, 149B Material (F21) Dark Surface (TF12) Ain in Remarks)
estrictive Type:	Layer (if observed): Cobbles, rocks, and rip-r		arology i	nust be present	, uniess distu		Hydric Soil Present	t? Yes⊠ No □
Restrictive Type: Depth		ар					- 3x Y J - b -	t? Yes⊠ No □

WET	LAND DETER	RMINATION DAT	A FORM - Northco	entral and Nor	theast Region		
Project/Site: West Bend Down	town Riverwalk Re	novation City/County:	City of West Bend/Washin	ngton County	Sampling Date: 10/09/2014		
Applicant/Owner:				State: WI	Sampling Point: 5		
Investigator(s): Jennifer Dietl a			Section, Township, Range				
Landform (hillslope, terrace, et	The second second		Local relief (concave, conv		Slope (%): 2-6%		
Subregion (LRR or MLRA): LR			Lat: Long: _	Datum:	NWI classification: none		
Soil Map Unit Name: Grays sil Are climatic/hydrologic condition		al for this time of year?	Yes□ No ⊠	(If no, explain in Re	TOTAL TOTAL CONTROL CO		
Are Vegetation, Soil				mstances" present?			
Are Vegetation, Soil				n any answers in Rer			
SUMMARY OF FINDING	S - Attach sit	e map showing sa	mpling point location	ons, transects, i	mportant features, etc.		
Holes II Es Vessiere Desc	-12 DV	⊠No	Is the Sampled Area				
Hydrophytic Vegetation Press Hydric Soils Present?	ent? ☐Yes ☐Yes	⊠No	within a Wetland?		Yes 🖾 No		
Wetland Hydrology Present?	□Yes	⊠No	17.				
7, 4,250, 2,75, 2,75, 2,75	. — ///	- 43	If yes, optional Wetla	ind Site ID:			
Remarks: (Explain alternative	e procedures here	or in a separate report.)	Below normal precipita	tion for the previou	us 90 days.		
HYDROLOGY							
Wetland Hydrology Indicate	ors:			Second	dary Indicators (minimum of two required)		
Primary Indicators (minimum	of one is required;	check all that apply)		☐ Si	urface Soil Cracks (B6)		
☐ Surface Water (A1	)	☐ Water-Sta	ined Leaves (B9)	□ Di	rainage Patterns (B10)		
High Water Table	0.145		auna (B13)		oss Trim Lines (B16)		
Saturation (A3)	,,,,,	the state of the s		sits (B15) Dry-Season Water Table (C2)			
				-	rayfish Burrows (C8)		
Water marks (B1)	(not		Sulfide Odor (C1)				
Sediment Deposits			Rhizospheres on Living Ro		aturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)		The second secon	of Reduced Iron (C4)	The second second	unted or Stressed Plants (D1)		
Algal Mat or Crust			on Reduction in Tilled Soils		eomorphic Position (D2)		
Iron Deposits (B5)			Surface (C7)	1000	nallow Aquitard (D3)		
Inundation Visible	on Aerial Imagery (	B7)   Other (Exp	plain in Remarks)	M	icrotopographic Relief (D4)		
☐ Sparsely Vegetate Field Observations:	d Concave Surface	(B8)		□ F/	AC-Neutral Test (D5)		
Surface Water Present?	Yes □ No ⊠	Depth (inches):					
Water Table Present?	Yes □ No ⊠						
Saturation Present?	Yes □ No ⊠			Wetland Hydrology	y Present? Yes □ No ⊠		
(includes capillary fringe)	, , , , ,			Wettand Hydrolog	y Present 1 165 Ino Z		
Describe Recorded Data (stre	eam gauge, monitor	ring well, aerial photos, p	previous inspections), if av	ailable:			
		ni las Disa Basilas					
Remarks: Sample site is lo	cated in the Milw	aukee River iloodway	/.				

Tree Stratum (Plot size: 30' radius)	Absolute % Cover 10	Dominant Species?	Indicator Status FACU	Dominance Test worksheet:
1. <u>Ulmus pumila</u>	10		FACO	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)
2	_			
3	-		_	Total Number of Dominant Species Across All Strata: 3 (B)
4	_		_	
5	_		_	Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
6	_	П	_	CATTER RESERVED TO THE PERSON OF THE PERSON
7		П	_	Prevalence Index worksheet:
	<u>10</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. <u>Ulmus pumila</u>	<u>3</u>		FACU	FACW species x 2 =
2. Fraxinus pennsylvanica	1		FACW	FAC species x 3 =
3			=	FACU species x 4 =
4	-			UPL species x 5 =
5	> <del></del>		=	Column Totals: (A) (B)
6,	_		_	Prevalence Index = B/A =
7			_	Hydrophytic Vegetation Indicators:
	4	= Total Cov	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3,01
1. Poa pratensis	40		FACU	☐ Morphological Adaptations¹ (Provide supporting
2. Agropyron repens	30		FACU	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Daucus carota	10		UPL	
4. Vitis riparia	10	П	FAC	Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
Parthenocissus quinquefolia	5		FACU	
6. Setaria sp.	<u>5</u>		NI	Definitions of Vegetation Strata:
7. Cirsium vulgare	4		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. Aster pilosus	2		FACU	at breast height (DBH), regardless of height
9. Taraxacum officinale	2		FACU	Saulis alabash Wasadu alanta laga than 3in DPH
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
			_	
11			-	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12.	108	= Total Cov	OF.	of size, and woody plants less than 3,20 it tall.
Woody Vine Stratum (Plot size: 30' radius)	100	- Total Cov	CI	Woody vines - All woody vines greater than 3.28 ft in
				height
1	-			
2	-			No. of the Control of
3				Hydrophytic Vegetation
4	-			Present? Yes □ No ⊠
	0	= Total Cov	er	1,444,470, 1,444,420 (1,444,42)

Dent	Matrix			Redox Fea	tures				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type'	Loc <sup>2</sup>		Texture	Remarks
0-2	10YR 3/2	100	Coldi (moist)		Турс		Silt loa		Old fill material
				_			-01-1-5-		
2-6	10YR 3/2	100						am with gravel	Old fill material
6+							Gravel		Refusal: Fill material
	Concentration, D=Dep	letion, RM=Re	duced Matrix, MS	S= Masked S	Sand Grains			Location: PL=Pore	
	I Indicators: Histosol (A1)		□ Pol	walue Relo	w Surface (S8	URRR	In		ematic Hydric Soils <sup>3</sup> : (10) (LRR K, L, MLRA 149B)
	Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Thick Dark Surface (A Sandy Mucky Mineral Sandy Gleyed Matrix ( Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LR of Hydrophytic vegeta	Surface (A11) 12) (S1) (S4) RR R, MLRA 1	☐ Loa ☐ Loa ☐ Dep ☐ Rec ☐ Dep ☐ Rec ☐ Rec ☐ Dep ☐ Dep ☐ Dep ☐ Rec ☐ Dep	amy Mucky amy Gleyed bleted Matri dox Dark Su bleted Dark dox Depres:	urface (F6) Surface (F7) sions (F8)	.RR K, L)		Dark Surface Polyvalue Be Thin Dark Su Iron-Mangane Piedmont Flo Mesic Spodic Red Parent M Very Shallow Other (Explain	Dark Surface (TF12)
	Layer (if observed)		id Hydrology Hide	t be present	t, arriodo diota	200 or proc			Total Control
	: Old fill material						H	ydric Soil Present	? Yes ☐ No ☒
Depth	n (inches): 6							22.03.1 0.076	

## Exhibit 11. Site Photos City of West Bend Downtown Riverwalk Renovation

SE Quarter, Section 11, NE Quarter, Section 14, T11N-R19E City of West Bend, Washington County



Photo 1. Northern view from footbridge north of Water Street.



Photo 2. Southern view from footbridge north of Water Street.

## Exhibit 11 continued. Site Photos City of West Bend Downtown Riverwalk Renovation

SE Quarter, Section 11, NE Quarter, Section 14, T11N-R19E City of West Bend, Washington County



Photo 3. Northern view of State Highway 33.



Photo 4. Southern view from Water Street.

## Exhibit 11 continued. Site Photos City of West Bend Downtown Riverwalk Renovation

SE Quarter, Section 11, NE Quarter, Section 14, T11N-R19E City of West Bend, Washington County



Photo 5. Old field and Lonicera X bella thicket at sampling point 2.



Photo 6. Remnant rip rap at sampling point 4.

## Exhibit 11 continued. Site Photos City of West Bend Downtown Riverwalk Renovation

SE Quarter, Section 11, NE Quarter, Section 14, T11N-R19E City of West Bend, Washington County

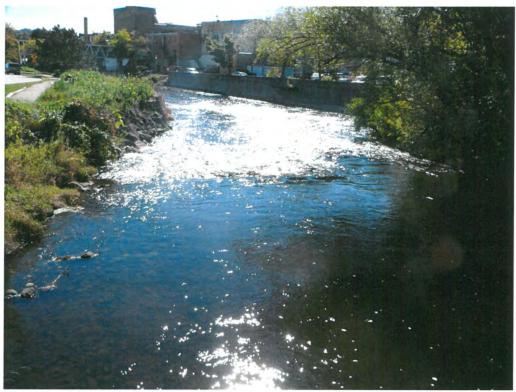


Photo 7. Erosion visible (top left) along Milwaukee River.

DOC# 00224979

#### COPY

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

TELEPHONE (262) 547-6721 FAX (262) 547-1103

Serving the Counties of:

June 10, 2015

MILWAUKEE OZAUKEE RACINE WALWORTH WASHINGTON

Re: SEWRPC No. CA-618-133



Ms. Melissa Phillips Landscape Architect West Bend Park, Recreation & Forestry Department 1115 S. Main Street West Bend, WI 53095

Dear Ms. Phillips:

This will respond to your electronic mail message of September 3, 2014, requesting that the Commission staff conduct a field inspection of a portion of the Lac Lawrann Conservancy property at 300 Schmidt Road where recreational trail improvements are proposed. The project area is located in parts of the southeast one-quarter of U.S. Public Land Survey Section 1, Township 11 North, Range 19 East, City of West Bend, Washington County, Wisconsin. The purpose of the field inspection was to identify and stake the boundaries of any wetlands within the project area.

Pursuant to your request, Commission staff identified and staked the wetland boundaries within the project area on October 8 and 9, 2014. It is the Commission staff's expectation that the wetland boundaries will be surveyed and identified on forthcoming design plans attendant to the proposed trail improvements. A copy of the wetland delineation report is attached for your reference.

Should you have any questions regarding this information, please do not hesitate to contact Mr. Christopher J. Jors, Specialist-Biologist (*cjors@sewrpc.org* or 262-953-3246).

Sincerely,

Kenneth R. Yunker, P.E. Executive Director

KRY/TMS/CJJ

CA618-133 LAC LAWRANN CONSERVANCY PROPOSED TRAILS LETTER (00226240).DOCX

Enclosure (# 00226360)

cc: Mr. Paul De Chant, Lac Lawrann Conservancy

Ms. Kathleen Kramasz, Wisconsin Department of Natural Resources

Mr. Anthony Jernigan, U.S. Army Corps of Engineers

## WETLAND DELINEATION REPORT

# LAC LAWRANN CONSERVANCY Proposed Trail Expansions

SE Quarter, Section 1, T11N, R19E CITY OF WEST BEND WASHINGTON COUNTY WISCONSIN

Prepared by:
Christopher Jors
Jennifer Dietl
Daniel Carter
Zofia Noe

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, WI 53187-1607

#### WETLAND DELINEATION REPORT OVERVIEW

(Based upon WDNR WETLAND Delineation Confirmation Request Check List)

#### INTRODUCTION

- Who requested the delineation Melissa Philipps, City of West Bend Landscape Architect
- Why the delineation was undertaken Proposed trail expansions at Lac Lawrann Conservancy
- Date the field work was completed October 8 and 9, 2014
- Who conducted field work Christopher Jors, Jennifer Dietl, Daniel Carter, Zofia Noe
- Statement of Qualifications

#### **METHODS**

- Description of Methods
- Sources Reviewed
  - o Topographic Map Exhibit 1
  - o Wisconsin Wetland Inventory (WWI) Map Exhibit 2
  - o Soil Survey and Floodplain Map Exhibit 3
  - Historical Aerial Photos Exhibits 4A to 4J (2010, 2005, 2000, 1995, 1990, 1980, 1970, 1963, 1950, and 1943)
  - Sanitary Sewer Service Map Exhibits 5
  - o Advanced Identification (ADID) Wetland Map Exhibit 6
  - o Draft NRCS Wetland Inventory Map Exhibit 7
- Description of any site specific agency guidance (site meetings, etc.) None

#### RESULTS AND DISCUSSION

- Antecedent hydrologic condition analysis **Drier than normal**
- Previous wetland delineation mapping None
- Existing environmental mapping (WWI mapping, Soil survey, etc.)
- Amount and types of wetland and upland forest in the project area
- Wetland/upland boundary explanation
- Disturbed and problematic areas encountered
- Other water resources located in the project area
- Other Considerations

#### LITERATURE CITED

Wetland Delineation Map – Exhibit 8

Vegetation Survey and Wetland Delineation Data Forms

- Preliminary Vegetation Survey Exhibit 9
- Wetland Determination Data Forms NE/NC Region Exhibit 10

Site Photos – Exhibit 11

Farm Service Agency Slide Review - Not Applicable

#### INTRODUCTION

This wetland delineation report responds to the City of West Bend's e-mail request to identify the boundaries of any wetland in a specified project area within the Lac Lawrann Conservancy property. The Conservancy is proposing to expand the existing recreational trails. The subject property is located at 300 Schmidt Road in the Southeast one-quarter of U.S. Public Land Survey Section 1, Township 11 North, Range 19 East, City of West Bend, Washington County, Wisconsin.

#### **Statement of Qualifications**

Christopher Jors, Specialist-Biologist, has worked at SEWRPC since 1993, and has been part of the wetland delineation team since 1994. He received a Bachelor's degree in Conservation Aspects of Biology from the University of Wisconsin – Milwaukee in 1993. Prior to working at SEWRPC, Chris worked at the UWM Field Station at the Cedarburg Bog in Saukville, WI, where he learned methods of sampling wetland plant communities within the Bog. Chris has attended various wetland training workshops including a U.S. Army Corps of Engineers Workshop on the Midwest Supplement to the 1987 Wetland Delineation Manual (2009) and a Wisconsin Department of Natural Resources Workshop on Techniques for Identifying Wetland Features on Farm Service Agency Aerial Slides (2009).

**Daniel Carter**, PhD, Senior Biologist, has worked at SEWRPC since 2013. He graduated with honors from Grinnell College with a Bachelor's degree in Biology. He later received a PhD in Biology from Kansas State University. Daniel has published several plant ecology articles in peer-reviewed journals, serves on the botany team for the Wisconsin Wildlife Action Plan, and co-teaches the UW-La Crosse Basic Wetland Plant Identification course. He has completed both basic and advanced wetland delineation training as well as Wisconsin Natural Heritage Inventory training. Prior to working for the Commission, Daniel served as project coordinator for a grassland restoration project overseen jointly by the United States Department of Agriculture and The Nature Conservancy and taught high school Biology.

**Jennifer Dietl**, Specialist-Biologist, earned a Bachelor's degree in Biology and Environmental Science from Carroll University in 1992. Jennifer has worked at the Commission from 1992 to 1997 and from 2006 to the present conducting wetland delineations, primary environmental corridor delineations, and vegetation surveys. In between years of service at the Commission she worked for the Wisconsin Department of Transportation – Green Bay as an LTE Environmental Analysis and Review Specialist – and the Wisconsin Department of Natural Resources – Green Bay as an LTE Hydrologist.

**Zofia Noe**, Specialist-Biologist, earned a Masters Degree in Coastal Marine and Wetland Studies from Coastal Carolina University. Zofia has experience in a variety of environmental assessments including water quality, aquatic plant communities, and vegetation surveys. Zofia began assisting with wetland delineations in the Summer of 2013.

#### **METHODS**

#### **Description of Methods**

The wetland boundary determinations were based upon the criteria and methodologies set forth in the 1987 Corps of Engineers Wetlands Delineation Manual; the January 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0); the Wisconsin Department of Administration Coastal Management Program's 1995 Basic Guide to Wisconsin's Wetlands and their Boundaries; and the State of Wisconsin 2014 Wetland Plant List.

Specific methods used to field identify wetland boundaries included the U.S. Department of the Army Corps of Engineers Routine Onsite Determination Method – Plant Community Assessment Procedure. This procedure

requires an initial identification of representative plant community types in the project area followed by a characterization of vegetation, soils, and hydrology for each type.

#### **Sources Reviewed**

Prior to conducting field work, Commission staff reviewed the following data sources: Washington County's topographic mapping (Exhibit 1), Wisconsin Wetland Inventory (Exhibit 2), Natural Resource Conservation Service's (NRCS) soil survey and FEMA Floodplains (Exhibit 3), Commission aerial photography (Exhibits 4A - 4J), Sanitary Sewer Service Map (Exhibit 5), ADID Wetland Map (Exhibit 6), draft NRCS Wetland Inventory Map (Exhibit 7), and precipitation data from the NRCS "WETS" tables and the Global Historical Climatology Network (GHCN-D).

#### RESULTS AND DISCUSSION

Christopher Jors, lead investigator, and Jennifer Dietl, Dr. Daniel Carter, and Zofia Noe, identified and staked the boundaries of the wetlands contained within the project area on October 8 and 9, 2014.

The results of the wetland delineation field inspection for this project area are shown on Exhibit 8, which includes proposed and existing trails, sample site numbers and locations, staked wetland boundaries, as well as primary environmental corridor and natural area boundaries.

#### **Antecedent Hydrologic Conditions**

WETS Station: GERMANTOWN, WI3058 GHCN-D Station: USC00479053 (West Bend, WI)

Climatological data were taken from the nearest WETS station with relevant data. Observed precipitation amounts were taken from the nearest GHCN-D weather station with monthly precipitation summaries.

	Month	3 yrs. In 10 less than	Normal	3 yrs. In 10 more than	Observed precip.	Condition dry, wet, normal	Condition value	Month weight value	Product of previous two columns
1st prior month	September	2.03	3.53	4.35	1.74	dry	1	3	3
2nd prior month	August	2.98	4.28	5.08	3.42	normal	2	2	4
3rd prior month	July	2.7	4.05	4.85	3.78	normal	2	1	2
	,							sum	9
		If sum is							
		6 - 9	drier than	า					
		10 - 14	normal						
		15 - 18	wetter th normal	an					
		Conclusion							
		Anteceden	t precipitat	ion was d	lrier than nor	mal.			

#### Previous wetland delineation mapping - None

#### **Existing Environmental Mapping**

The Washington County topographic map (Exhibit 1) shows the project area encompassing a glacially-carved valley between Rainbow Lake to the north and Lac Lawrann to the south. The outer, steeply-sloped, forested lands of this valley are contained within the northwest and southeast portions of the project area. The central portion of the project area contains an esker surrounded by lowlands. A cross-section of the project area indicates elevations ranging from 948 feet above sea level at the northwest edge, dropping to an elevation of 900 feet in the northwest lowland, rising to an elevation of 930 feet on top of the esker, dropping again to 900 feet in the southeast lowland, and rising to 958 feet at the southeast edge of the project area.

The Wisconsin Wetland Inventory map (WWI) (Exhibit 2) indicates two wetland complexes in the project area. The first wetland is located at the southern edge of Rainbow Lake and surrounds the north side of the esker. It is classified as emergent wet meadow (E1H), forested wetland (T3K and T2K), a small area of aquatic bed (A3L) on the south side of Rainbow Lake, and Emergent wet meadow /open water (E4/W0H) associated with an unnamed pond in the northeast corner of the project area. A second wetland is mapped on the south side of the esker, northeast of Lac Lawrann, and is classified as a forested wetland (T3K).

The NRCS Soil Survey map (Exhibit 3) shows that the lowlands within the project area consist largely of very poorly drained Houghton mucky peat (Hu) and a small area of Marsh (Mf), both with 0 to 2% slopes. Mapped upland soils in the project area include a Sisson-Casco-Hochheim complex with 20 to 30% slopes and a smaller component of Zurich silt loam (ZuB) with 2 to 6% slopes.

Historical aerial photos of the project area were reviewed for years 2010 through 1943 and are attached as Exhibits 4A to 4J. This review indicated that the forested lands within the project area have remained largely intact over that time period. The most significant disturbance to the project area occurred in the early 1900's when a railroad spur was constructed between the mainline tracks southwest of the project area, leading to Wallace Lake northeast of the project area. This rail spur was used for transporting ice from Wallace Lake and bricks from a factory east of the project area. Land disturbances on the far eastern portion of the project area, apparently related to the brick factory, are evident on the 1943 aerial photo. While the rail spur was abandoned by 1950, the route was evident on all photos reviewed. Lands northwest and southeast of the project area are in agriculture on the 1943 photo. Lowlands draining to Rainbow Lake, located northwest of the project area, appear open, pasture or managed as pasture, as shown on the 1943 photo. An excavated pond shows up on the 1963 photo just west of Rainbow Lake, behind a roadway embankment between the pond and lake. An agricultural field is converted to a conifer plantation along the southeastern border of the project area as of the 1970 photo. Agricultural lands were converted to multi-family residential uses northwest of the project area by the 2010 photo.

SEWRPC's sanitary sewer map (Exhibit 5) shows that the project area is located in the City of West Bend and Environs planned sanitary sewer service area. The entire project area is contained within a primary environmental corridor (PEC).

The ADID (Advance Identification) wetland map (Exhibit 6) indicates that all wetlands in the project area have been designated as ADID wetlands under the Section 404(b)(1) Guidelines of the Clean Water Act based upon the PEC designation noted above. The subject wetlands are deemed generally unsuitable for the discharge of dredge and fill material.

The draft NRCS Wetland Inventory Map (Exhibit 7) shows that the project area is comprised of wetlands (W) and not inventoried (NI) areas.

#### Amount and Types of Wetlands and Upland Forest in the Project Area

One wetland was identified and inventoried within the project area (Exhibit 9, Plant Community Area No. 2). This approximately 13.8-acre wetland is part of the Rainbow Lake and Lac Lawrann wetland complex and consists of open water, shallow marsh, fresh (wet) meadow, shrub-carr, and second growth, Southern wet lowland

hardwoods. Disturbances to the wetland include the establishment of foopaths, and filling and grading for a former railroad spur. While no Federal- or State-designated Special Concern, Threatened, or Endangered species were observed in the wetland during the field inspection, SEWRPC has a record for Northern yellow lady's-slipper orchid, *Cypripedium parviflorum var. makasin*, a State-designated Special Concern species, for this wetland complex.

The forested upland portions of the plant community area were also inventoried (Exhibit 9, Plant Community Area No. 1). This approximately 15.0-acre upland consists of Red oak–Sugar maple dry-mesic hardwoods. Disturbances include the establishment of footpaths, filling and grading along a former railroad spur, and selective cutting of trees. While no Federal- or State-designated Special Concern, Threatened, or Endangered species were observed in the upland during the field inspection, SEWRPC has records for Forked aster, *Eurybia furcata* (formerly *Aster furcatus*), a State-designated Threatened species; and Autumn coral-root, *Corallorhiza odontorhiza*, a State-designated Special Concern species, for this upland complex. The wetland and upland plant community areas were inventoried using a meander method on the days of the field inspections.

Further, it should be noted that all of the wetlands and most of the uplands within the project area are contained within the Lac Lawrann Conservancy Upland Woods and Wetlands (see Exhibit 8), identified as a Natural Area of countywide or regional significance (NA-2) in the Commission's *Amendment to the Natural Areas and Critical Species Habitat Protection and Management Plan for the Southeastern Wisconsin Region*, dated December, 2010.

#### Wetland/Upland Boundary Explanation

Twelve representative sample sites were identified within the project area. The Wetland Determination Data Forms describing the findings at each sample site are attached as Exhibit 10. The locations of the sample sites are shown on Exhibit 8. The wetland boundary was determined using breaks in topography, changes in vegetation composition, visual identification of wetland hydrology, and presence of hydric soils.

#### **Disturbed and Problematic Areas Encountered**

No disturbed and/or problematic areas were encountered.

#### Other Water Resources Located in the Project Area

Rainbow Lake, Lac Lawrann, and an unnamed small lake/pond are identified as water bodies by USGS as indicated on the Wisconsin Wetland Inventory Map (Exhibit 2). While no streams are identified by USGS within the project area, surface water generally flows from northeast to southwest within the project area, eventually reaching the Milwaukee River about 1,750 feet southwest of the project area.

#### **Other Considerations**

All wetlands located within the project area are contained within a recorded Primary Environmental Corridor (PEC). Accordingly, these wetlands have been designated as Advanced Delineation and Identification (ADID) wetlands under the Section 404(b)(1) Guidelines of the Clean Water Act and are deemed generally unsuitable for the discharge of dredge and fill material. The nonagricultural performance standards set forth in Section NR 151.125 of the *Wisconsin Statutes*, requires establishment of a 75-foot impervious surface protective area to protect these higher quality wetlands. This designated protective area boundary is measured horizontally from the delineated wetland boundary to the closest impervious surface. The protective area requirements should be taken into consideration for any planned improvements within the project area and it is suggested that you contact WDNR regarding approaches to meet the requirements. Finally, please be advised that no Federal or State regulatory jurisdiction determinations relative to any wetland permits or certifications are made under this report.

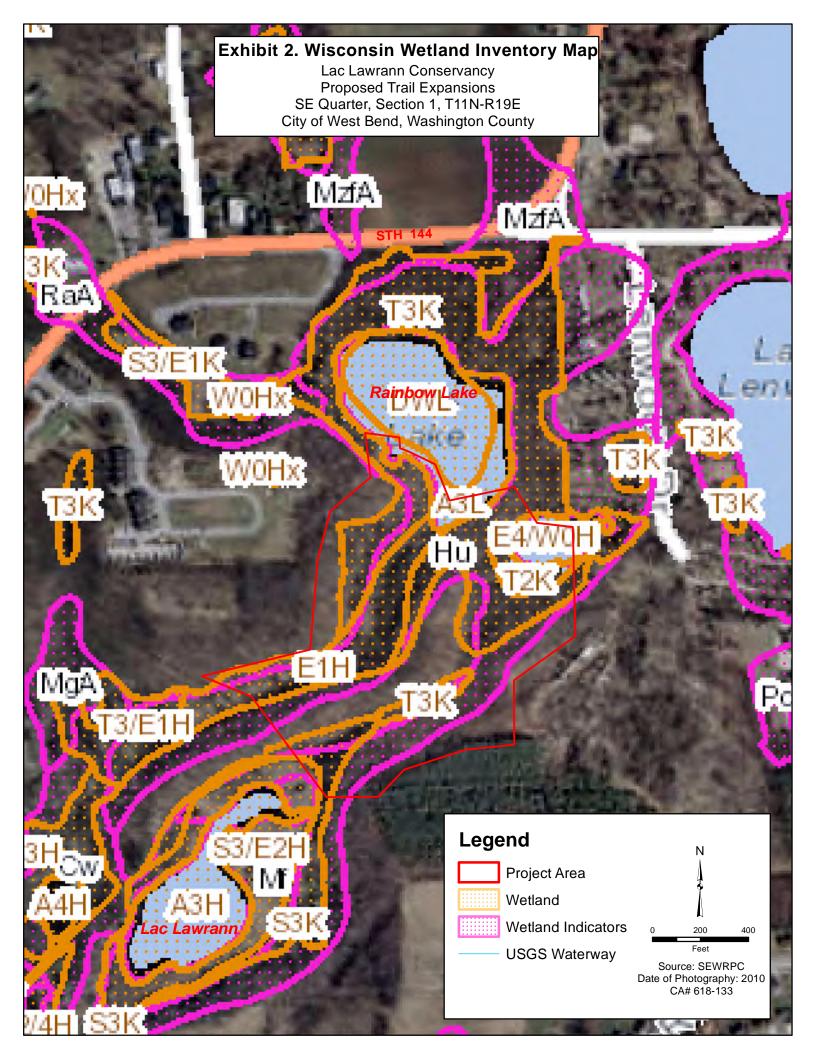
#### LITERATURE CITED

- U.S. Army Corps of Engineers, 2014, State of Wisconsin Wetland Plant List
- U.S. Army Corps of Engineers, 2012, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0). U.S. Army Engineer Research and Development Center, January 2012.
- U.S. Army Corps of Engineers, 1987, U.S. Army Corps of Engineers wetlands delineation manual. Wetlands Research Program Technical Report Y-87-1.

Wisconsin Coastal Management Program, 1995, Basic Guide to Wisconsin's Wetland and their Boundaries.

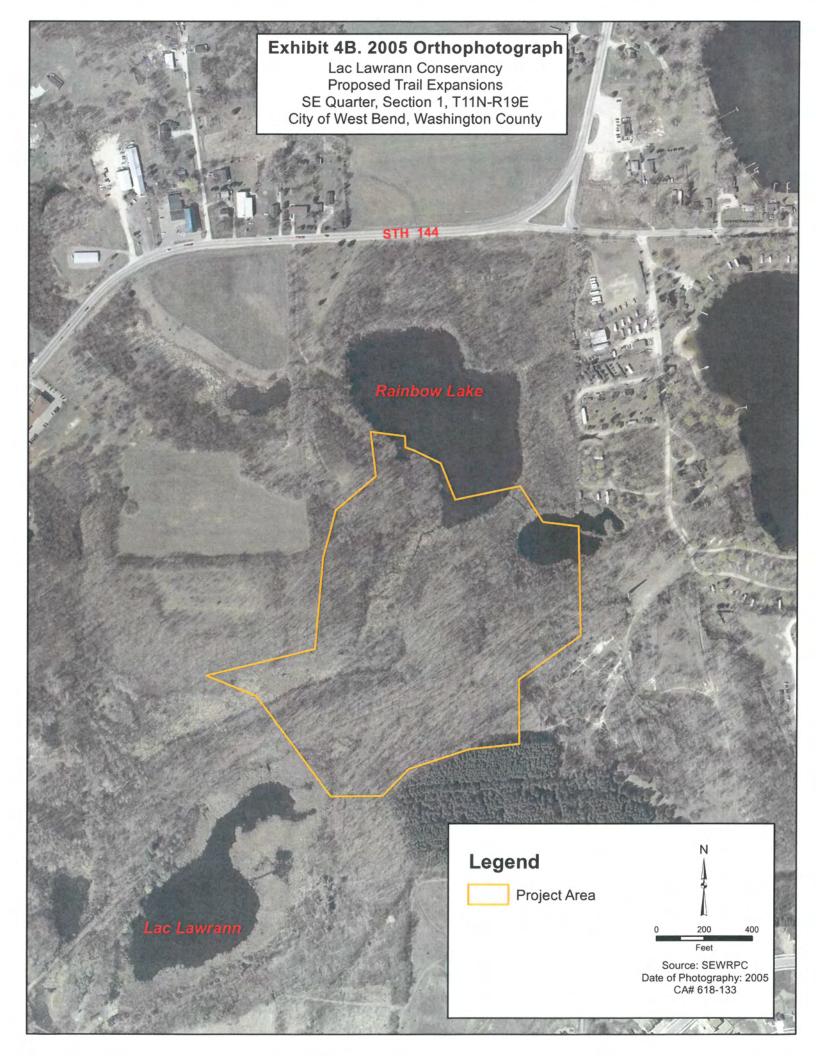
CA618-133 Lac Lawrann Conservancy Proposed Trails (00224654)

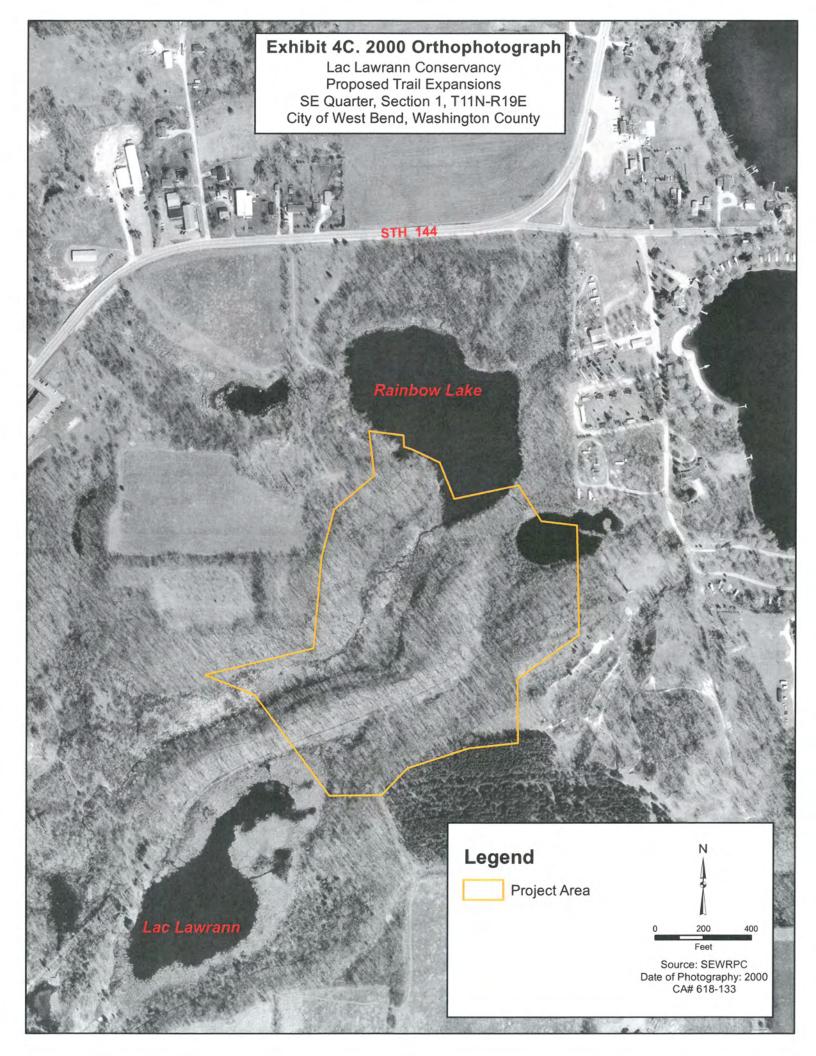


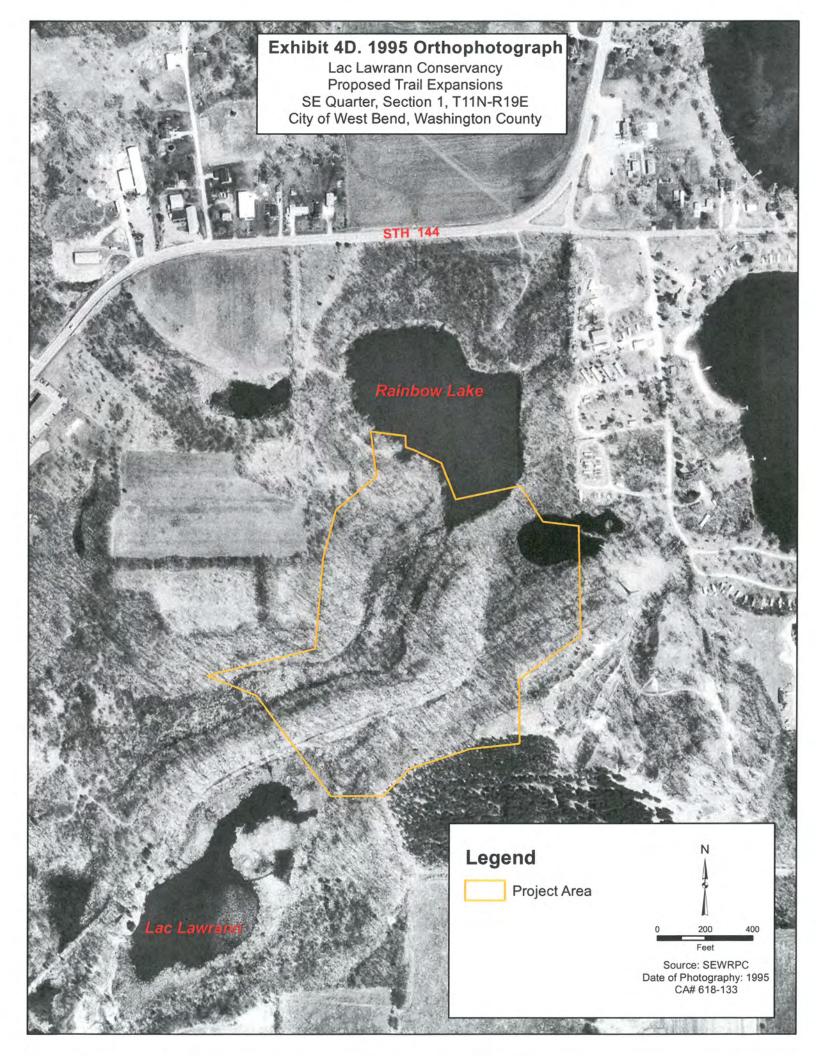


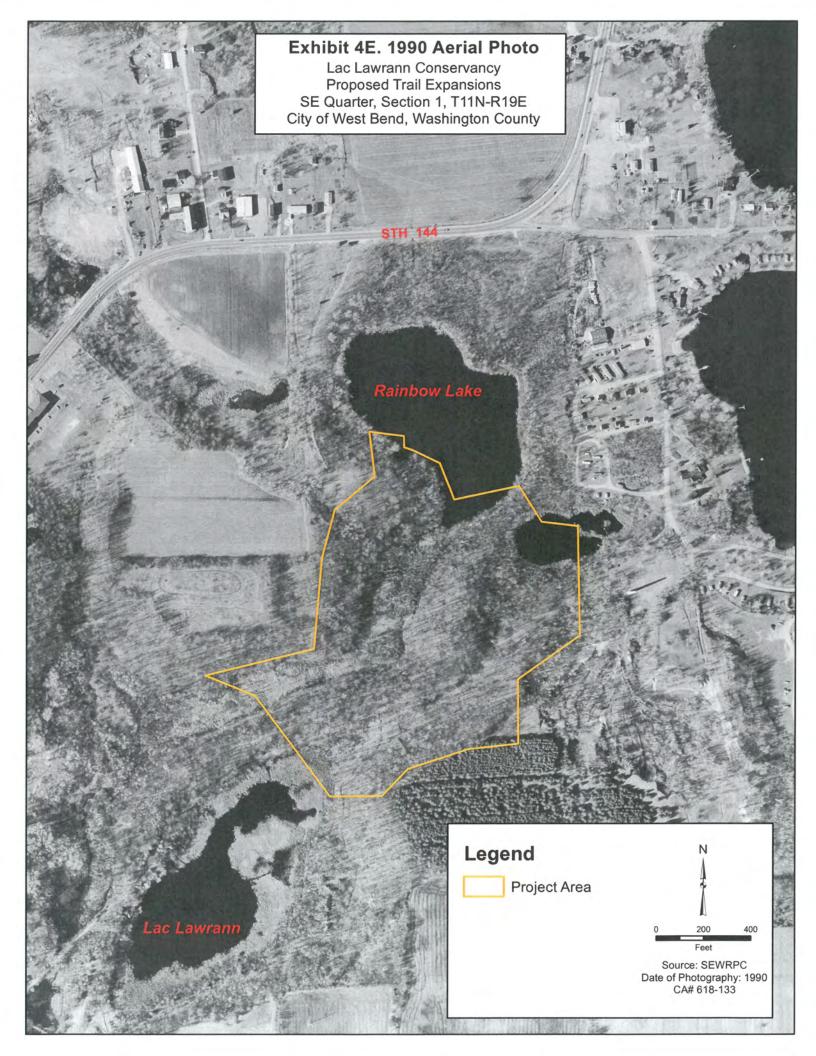


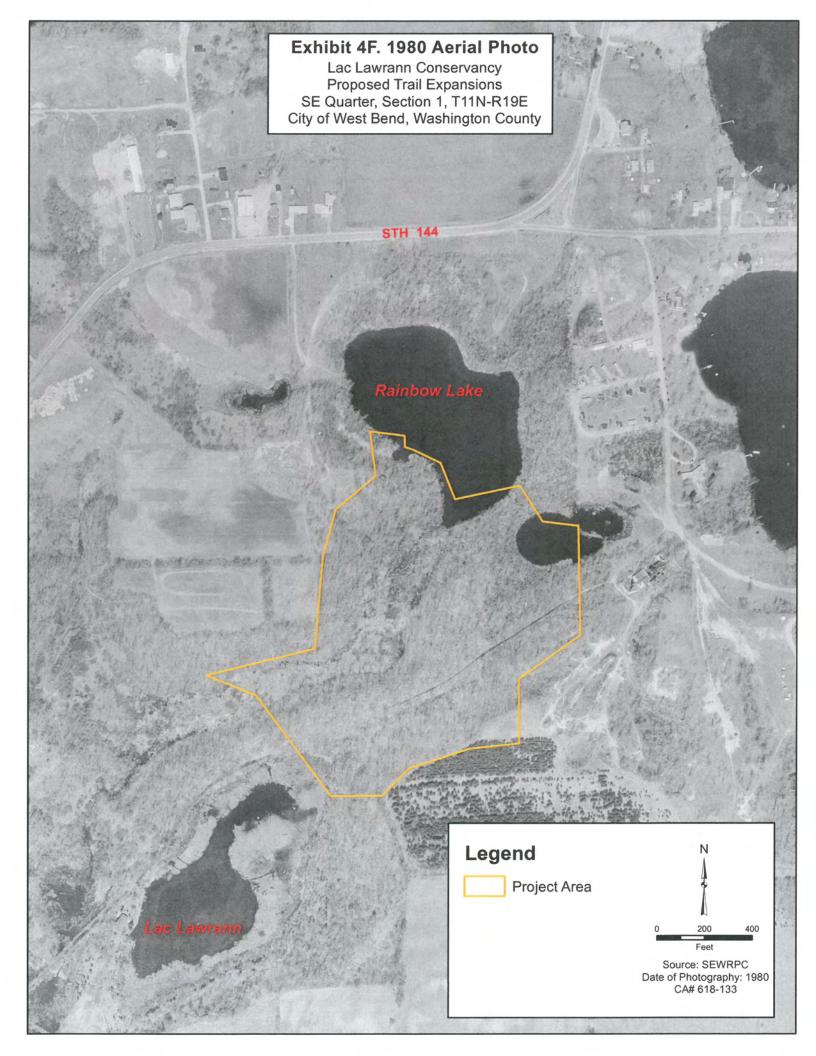


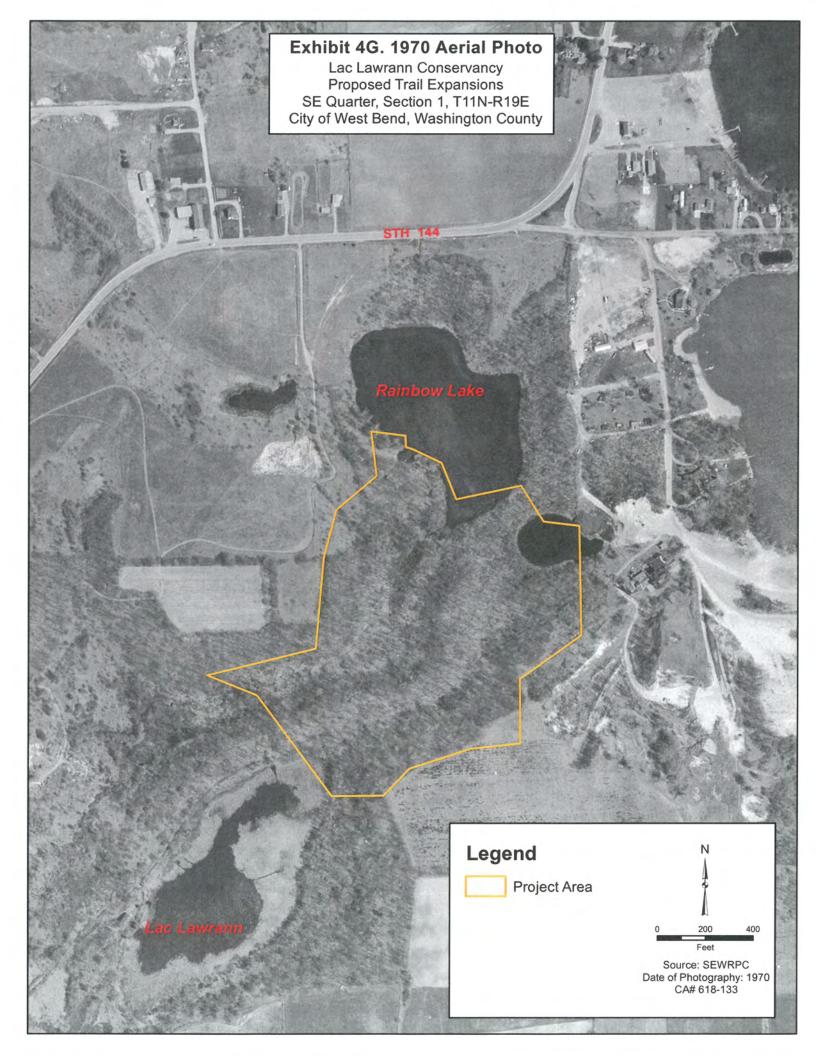


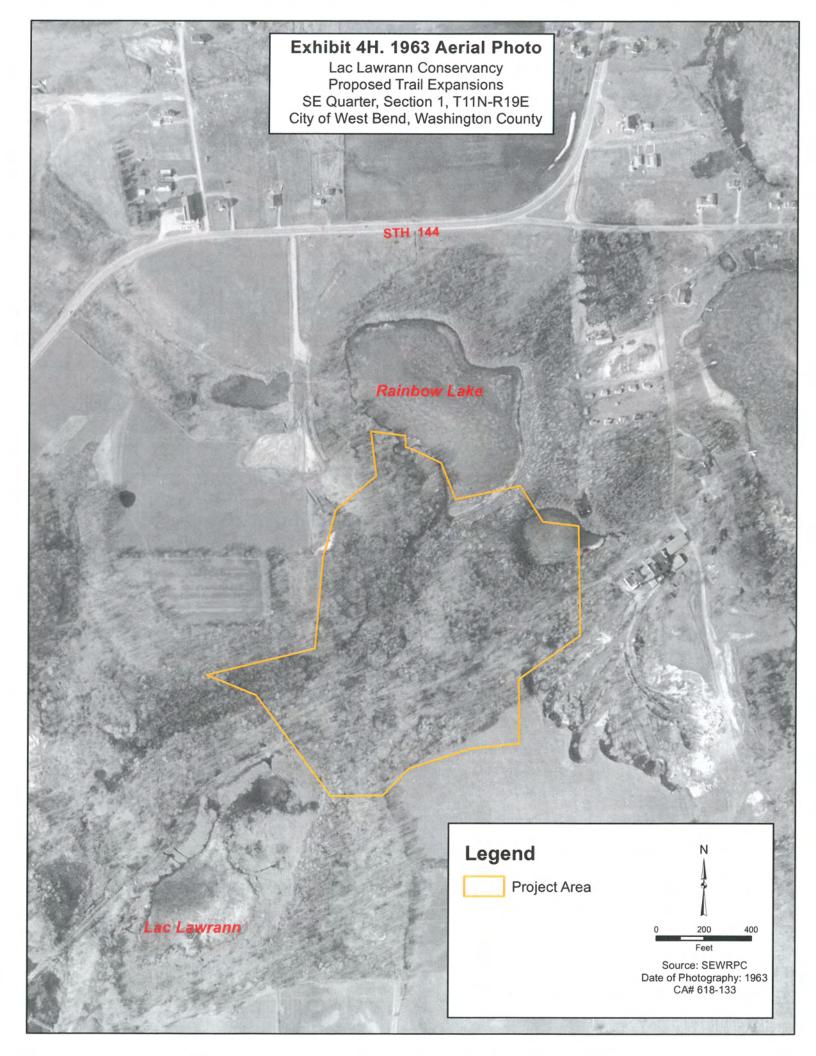


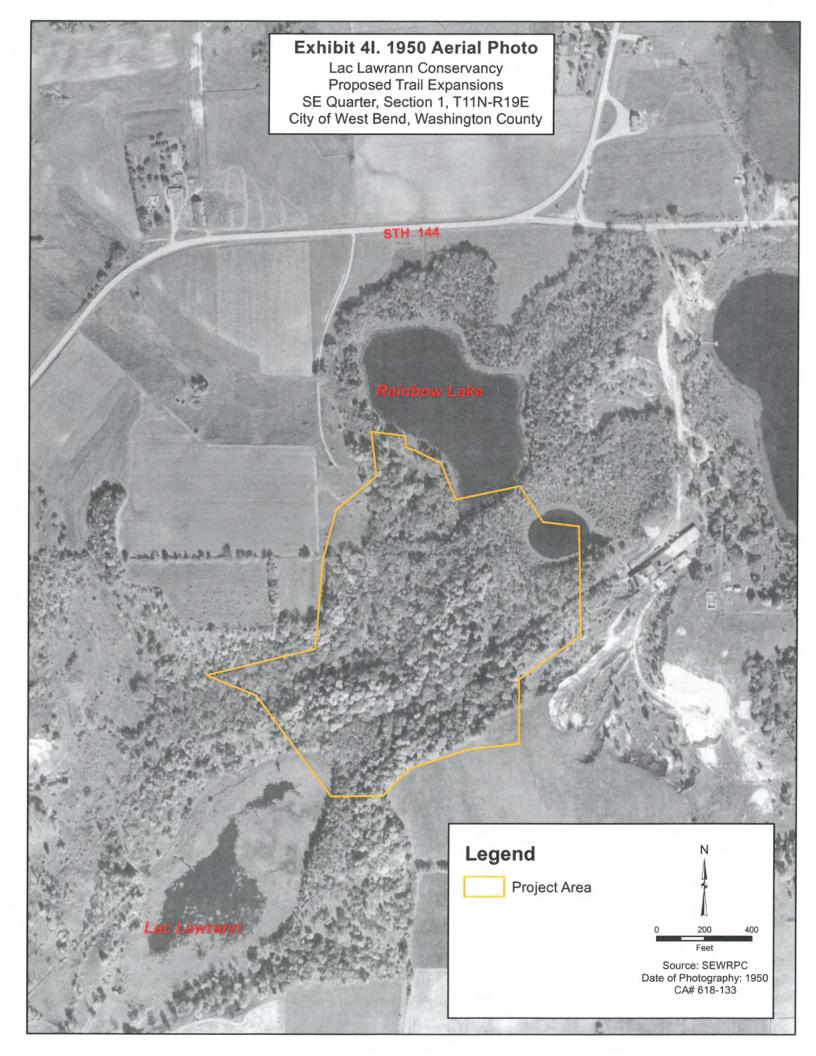


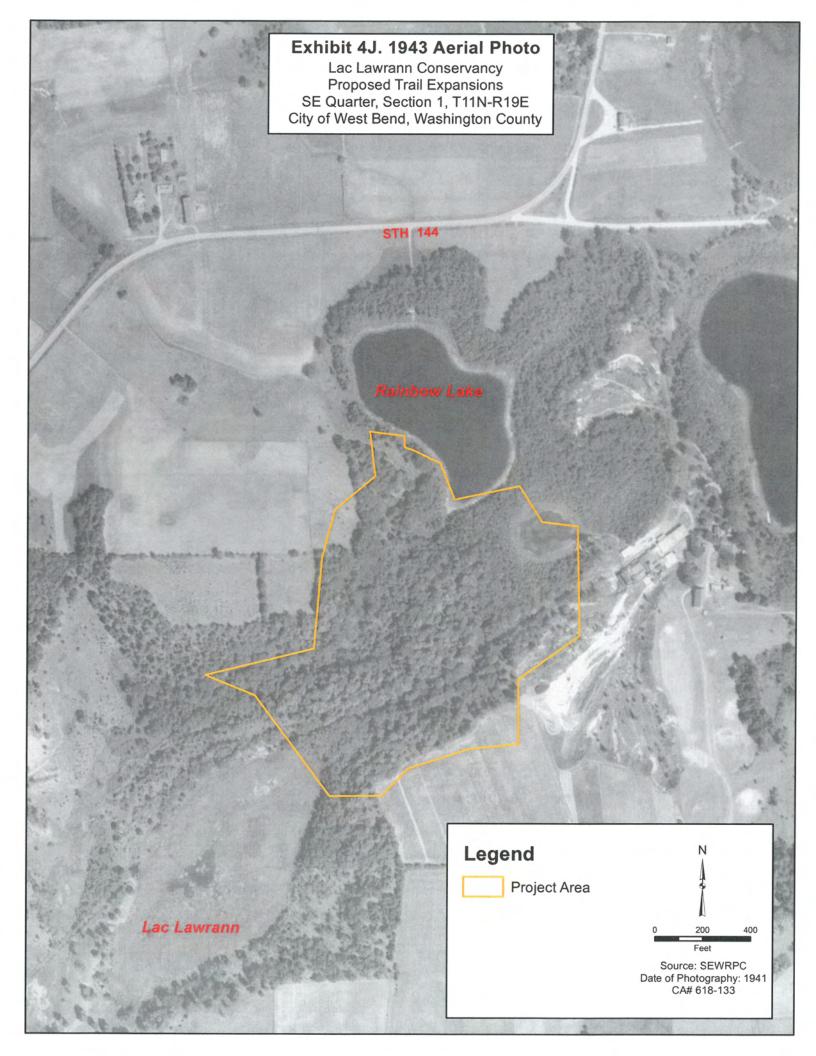












## **EXHIBIT 5. Sanitary Sewer Service Map**

Lac Lawrenn Conservancy - Proposed Trail Expansions SE Quarter, Section 1, T11N-R19E City of West Bend, Washington County

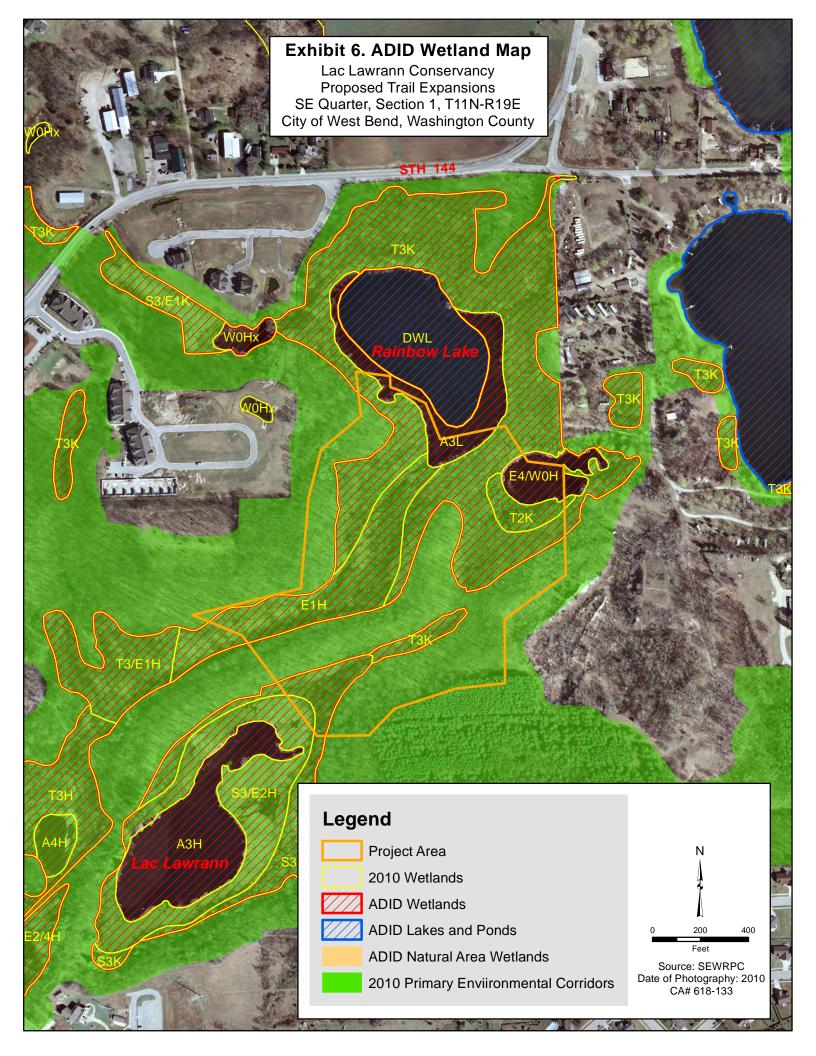
Map 7-8

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE CITY OF WEST BEND AND ENVIRONS

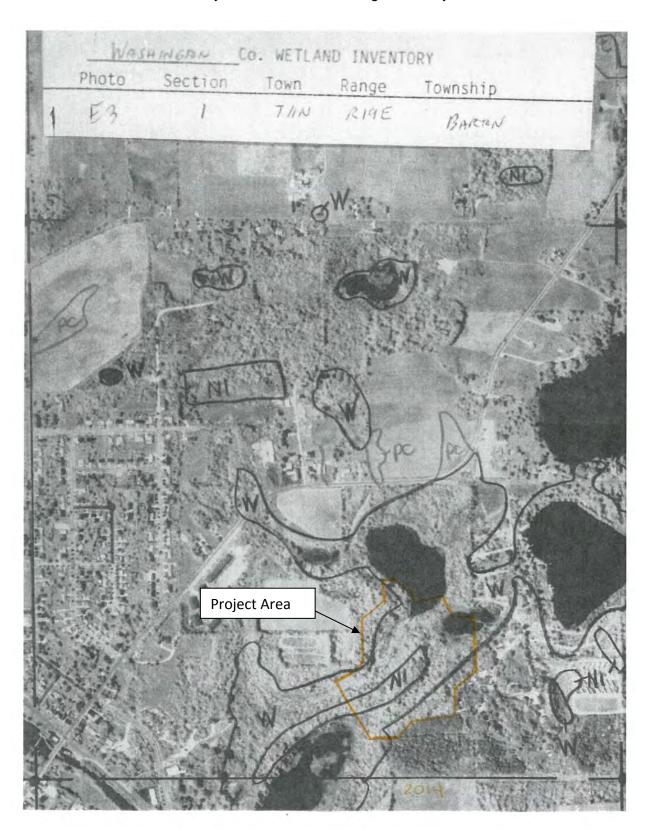
U. S. Public Land Survey Sections 1, 2, 11, and 12 Township 11 North, Range 19 East

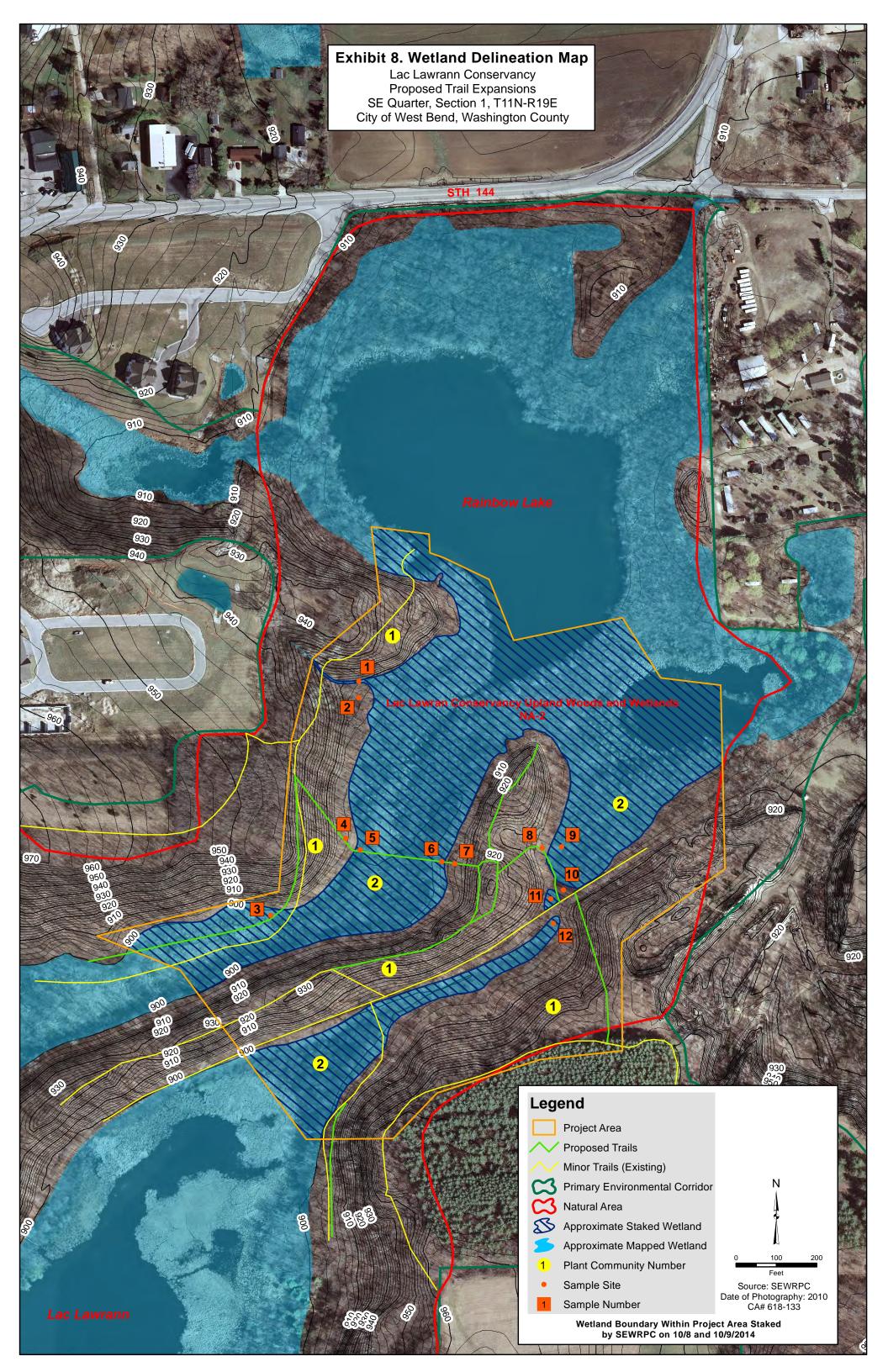






**EXHIBIT 7. NRCS Wetland Inventory Map**Lac Lawrenn Conservancy - Proposed Trail Expansions SE Quarter, Section 1, T11N-R19E City of West Bend, Washington County





SVY4188 CA618-133

### **EXHIBIT 9**

# PRELIMINARY VEGETATION SURVEY LAC LAWRANN CONSERVANCY PROPOSED TRAIL EXPANSIONS

Dates: October 8 and 9, 2014

Observers: Daniel L. Carter, PhD., Senior Biologist

Christopher J. Jors, Biologist Jennifer L. Dietl, Biologist Zofia Noe, Biologist

Southeastern Wisconsin Regional Planning Commission

Location: City of West Bend in parts of the Southeast one-quarter of U.S. Public

Land Survey Section 1, Township 11 North, Range 19 East,

Washington County, Wisconsin.

SPECIES LIST: PLANT COMMUNITY AREA NO. 1 - NATIVE PLANT SPECIES

Co-dominant plant species

Acer saccharum--Sugar maple

<u>Actaea</u> <u>pachypoda</u>--White baneberry <u>Adiantum</u> <u>pedatum</u>--Maidenhair fern

Agrimonia sp.--Agrimony

Amphicarpa bracteata--Hog peanut
Anemone quinquefolia--Wood anemone
Aquilegia canadensis--Columbine
Arisaema triphyllum--Jack-in-the-pulpit
Asclepias exaltata--Poke milkweed
Aster lateriflorus--Calico aster

Aster macrophyllus--Large-leaved aster

<u>Aster ontarionis</u>--Ontario aster <u>Betula papyrifera</u>--Paper birch

Brachyelytrum erectum--Long-awned wood grass

Carex blanda--Wood sedge

Carex pensylvanica -- Pennsylvania sedge

<u>Carpinus caroliniana</u>--Musclewood <u>Carya cordiformis</u>--Yellowbud hickory <u>Carya ovata</u>--Shagbark hickory

<u>Caulophyllum thalictroides</u>--Blue cohosh <u>Cinna arundinacea</u>--Wood reed grass <u>Circaea lutetiana</u>--Enchanter's nightshade <u>Cornus alternifolia</u>--Pagoda dogwood

Elymus villosus--Silky wild rye

Equisetum hyemale--Scouring-rush

Eupatorium rugosum--White snakeroot

Fagus grandifolia--American beech

Fraxinus americana--White ash

Fraxinus pennsylvanica--Green ash

Galium boreale--Northern bedstraw

Galium circaezans--Wild licorice

Galium triflorum--Shining bedstraw

Galium triflorum--Sweet-scented bedstraw

<u>Geranium</u> <u>maculatum</u>--Wild geranium <u>Geum</u> <u>canadense</u>--White avens

<u>Hackelia</u> <u>virginiana</u>--Stickseed <u>Hamamelis</u> <u>virginiana</u>--Witch-hazel

Helianthus strumosus--Pale-leaved wood sunflower

Hepatica americana -- Round-lobed hepatica

Heracleum lanatum--Cow parsnip

Hystrix patula -- Bottlebrush grass

Lobelia inflata--Indian tobacco

Lonicera prolifera--Yellow honeysuckle

Muhlenbergia sylvatica--Woodland satin grass

Oryzopsis racemosa--Black-seeded rice grass

Osmorhiza claytonii--Sweet cicely

Osmunda cinnamomea -- Cinnamon fern

Ostrya virginiana--Ironwood

Populus grandidentata--Large-toothed aspen

Populus tremuloides -- Quaking aspen

Prunella vulgaris--Selfheal

Prunus serotina -- Black cherry

Prunus virginiana -- Chokecherry

Quercus alba--White oak

Quercus macrocarpa--Bur oak

### Quercus rubra--Northern red oak

Ranunculus recurvatus--Hooked buttercup

Ribes americanum--Wild black current

Ribes cynosbati--Pasture gooseberry

Rubus occidentalis -- Black raspberry

Rubus strigosus--Red raspberry

Scrophularia sp.--Figwort

Smilax ecirrhata--Low carrion flower

Smilax tamnoides--Bristly greenbrier

Solidago flexicaulis -- Zig-zag goldenrod

Solidago gigantea--Giant goldenrod

Thalictrum dioicum--Woodland meadow rue

Tilia americana--Basswood

Ulmus americana--American elm

Uvularia grandiflora--Bellwort

Viburnum acerifolium--Maple leaf viburnum

Viola sp.--Violet

Zanthoxylum americanum--Prickly-ash

## Non-native plant species

Berberis thunbergii--Japanese barberry

<u>Dactylis</u> <u>glomerata</u>--Orchard grass

Elaeagnus umbellata--Autumn-olive

Epipactis helleborine--Helleborine

Lonicera X bella--Hybrid honeysuckle

Poa compressa--Canada bluegrass

Rhamnus cathartica--Common buckthorn

Viburnum opulus--European highbush-cranberry

Total number of plant species: 81

Number of alien, or non-native, plant species: 8 (10 percent)

This approximately 15-acre upland plant community area is part of a larger primary environmental corridor and consists of red oak-sugar maple dry-mesic hardwoods. Disturbances to the plant community area include the establishment of footpaths, filling and grading for a former railroad spur, and selective cutting of trees. While no Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection, SEWRPC has records of Forked aster ((Eurybia furcata)), a State-designated Threatened species and Autumn coral-root (Corallorhiza odontorhiza), a State-designated Special Concern species for this upland woodland. Further, SEWRPC's 2010 Amendment to the Natural Areas and Critical Species Habitat Protection and Management Plan for the Southeastern Wisconsin Region, identifies this plant community area as part of the Lac Lawrann Conservancy Upland Woods and Wetlands, a Natural area of Countywide or Regional significance (NA-2).

### PLANT COMMUNITY AREA NO. 2 - NATIVE PLANT SPECIES

Acer rubrum--Red maple

Alnus rugosa -- Tag alder

Aronia melanocarpa--Black chokeberry

Aster lateriflorus--Calico aster

Aster lucidulus--Swamp aster

Aster ontarionis -- Ontario aster

Athyrium filix-femina--Lady fern

Betula alleghaniensis -- Yellow birch

Betula papyrifera--Paper birch

Betula pumila -- Bog birch

Bidens frondosa--Common beggars-ticks

Boehmeria cylindrica--False nettle

Calamagrostis canadensis -- Canada bluejoint

Carex blanda -- Wood sedge

Carex granularis--Pale sedge

Carex lacustris -- Lake sedge

Cicuta maculata -- Spotted water-hemlock

Cinna arundinacea -- Wood reed grass

Circaea lutetiana -- Enchanter's nightshade

Cornus amomum--Silky dogwood

Cornus stolonifera--Red-osier dogwood

Dryopteris cristata--Crested wood fern

Elymus virginicus--Virginia wild rye

Eupatorium maculatum--Joe-Pye weed

Eupatorium perfoliatum--Boneset

Fragaria virginiana -- Wild strawberry

Fraxinus americana--White ash

Fraxinus nigra--Black ash

Fraxinus pennsylvanica--Green ash

Galium triflorum -- Sweet-scented bedstraw

Geum canadense--White avens

Glyceria striata--Fowl manna grass

Heracleum lanatum--Cow parsnip

Ilex verticillata--Winterberry

Impatiens capensis -- Jewelweed

Larix laricina -- Tamarack

Lemna minor--Lesser duckweed

Lycopus uniflorus--Northern bugleweed

Matteuccia struthiopteris -- Ostrich fern

Nymphaea odorata--White water lily

Onoclea sensibilis -- Sensitive fern

Pedicularis lanceolata -- Swamp lousewort

Pilea fontana -- Clearweed

Pilea pumila--Clearweed

Polygonum amphibium--Water smartweed

Populus deltoides--Cottonwood

Prunella vulgaris--Selfheal

Rhus vernix--Poison sumac

Ribes americanum--Wild black current

Rubus pubescens--Dwarf blackberry

Rumex orbiculatus--Great water dock

Salix bebbiana--Beaked willow

Sanicula sp.--Black snakeroot

Scirpus atrovirens--Green bulrush

Scutellaria lateriflora--Sideflower skullcap

Solidago gigantea--Giant goldenrod

Solidago patula--Swamp goldenrod

Stachys tenuifolia -- Smooth hedge-nettle

Symplocarpus foetidus--Skunk cabbage

Thelypteris palustris--Marsh fern

Tilia americana--Basswood

Native Plant Species cont'

<u>Typha</u> <u>latifolia</u>--Broad-leaved cat-tail <u>Ulmus</u> <u>americana</u>--American elm <u>Viburnum</u> <u>lentago</u>--Nannyberry <u>Viola</u> sp.--Violet

**NON-Native Plant Species** 

Alliaria officinalis--Garlic-mustard

Phalaris arundinacea--Reed canary grass

Rhamnus cathartica--Common buckthorn

Solanum dulcamara--Deadly nightshade

Typha angustifolia--Narrow-leaved cat-tail

Total number of plant species: 70

Number of alien, or non-native, plant species: 5 (7 percent)

This approximately 13.8-acre plant community area is part of the Rainbow Lake and Lac Lawrann wetland complex and consists of open water, shallow marsh, fresh (wet) meadow, shrub-carr, and second growth, Southern wet lowland hardwoods. Disturbances to the plant community area include the establishment of footpaths and filling and grading for a former railroad spur. While no Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection, SEWRPC has a record of Northern yellow lady's-slipper orchid (*Cypripedium parviflorum* var. *makasin*), a State-designated Special Concern species for the wetland complex. Further, SEWRPC's 2010 Amendment to the *Natural Areas and Critical Species Habitat Protection and Management Plan for the Southeastern Wisconsin Region*, identifies this plant community area as part of the Lac Lawrann Conservancy Upland Woods and Wetlands, a Natural area of Countywide or Regional significance (NA-2).

## **EXHIBIT 10**

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/C	ounty: City of West Bend/Wash		Sampling Date: <u>10/09/2014</u>		
Applicant/Owner:		State: WI	Sampling Point: 1		
nvestigator(s): Jennifer Dietl and Zofia Noe; SEWRPC		e: SE 1/4 Section 1, T11N, R1			
Landform (hillslope, terrace, etc.): narrow drainage way	Local relief (concave, con		Slope (%): <u>20-30%</u>		
Subregion (LRR or MLRA): <u>LRR K</u> Soil Map Unit Name: <u>Sisson-Casco-Hoccheim complex (SvE)</u>	Lat: Long: _	Datum:	NWI classification: T3K		
Are climatic/hydrologic conditions on the site typical for this time of	year? Yes ☐ No ☒	(If no, explain in Remarks)	TWVI classification. Tok		
Are Vegetation, Soil, or Hydrology significantly di		mstances" present? Yes ⊠	No □		
Are Vegetation, Soil, or Hydrology naturally probl		n any answers in Remarks.)	- <u>-</u>		
			nt footures, etc		
SUMMARY OF FINDINGS – Attach site map showii	ng samping point locati	ons, transects, importa	nt leatures, etc.		
	1- 41 01- 1 4	_			
Hydrophytic Vegetation Present?	Is the Sampled Are within a Wetland?	a ⊠ Yes	□No		
Hydric Soils Present?	within a wettand.	<u>⊠</u> 163			
Wetland Hydrology Present?   ☐ Yes ☐ No	If was optional Wetle	and Site ID: Plant Community	Area No. 2		
Remarks: (Explain alternative procedures here or in a separate re					
		•			
narrow (5 to 10 feet) drainage way with steep slopes	on the north side and a si	ightly convex terrace to t	ne south.		
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that app	ly)	☐ Surface Soi	l Cracks (B6)		
Curfoce Water (A4)	tor Stained Leaves (DO)		, ,		
	ter-Stained Leaves (B9)	<del></del>	atterns (B10)		
	uatic Fauna (B13)	Moss Trim			
Saturation (A3)	rl Deposits (B15)		Water Table (C2)		
☐ Water marks (B1) ☐ Hyd	drogen Sulfide Odor (C1)	☐ Crayfish Bu	rrows (C8)		
Sediment Deposits (B2)	dized Rhizospheres on Living Ro	oots (C3) Saturation \	/isible on Aerial Imagery (C9)		
<del></del>	sence of Reduced Iron (C4)		Stressed Plants (D1)		
<del></del>	cent Iron Reduction in Tilled Soil				
<del></del>					
	n Muck Surface (C7)	Shallow Aq			
Inundation Visible on Aerial Imagery (B7) Oth	er (Explain in Remarks)	Microtopog	aphic Relief (D4)		
☐ Sparsely Vegetated Concave Surface (B8)			al Test (D5)		
Field Observations:					
Surface Water Present? Yes ☐ No ☒ Depth (inches	s):				
Water Table Present? Yes ☐ No ☒ Depth (inches	3):				
Saturation Present? Yes No Depth (inches		Wetlend Hydrology Present	3 Yes⊠ No □		
(includes capillary fringe)	·/·	Wetland Hydrology Present	? Yes⊠ No □		
Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos previous inspections) if a	(ailable: Topo man (Eyhibit 1)	WWI man (Exhibit 2) Soil		
Survey map (Exhibit 3), aerial photos (Exhibit 4).	iotos, previous inspections), ii av	rallable. Topo map (Exhibit 1),	vvvi map (Exmort 2), com		
D All about aired Dhamania aothartica alaman		t manuficular atoma a and abo	llavy va a ta		
Remarks: All shrub sized Rhamnus cathartica along na	arrow drainage way exhibi	t multiple stems and sna	llow roots.		

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. Fraxinus pennsylvanica	% Cover 15	<u>Species?</u>	Status FACW	
	<u></u>		<u>1 AOII</u>	Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)
2				
3				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7				Prevalence Index worksheet:
	<u>15</u>	= Total Cove	r	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Rhamnus cathartica	<u>40</u>	$\boxtimes$	<u>FAC</u>	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6		П		Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>40</u>	= Total Cove	r	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Rhamnus cathartica	<u>15</u>	$\boxtimes$	<u>FAC</u>	☐ Morphological Adaptations¹ (Provide supporting
2. Sanicula sp.	<u>3</u>	П	<u>FACU</u>	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
3. Aster lateriflorus	<u>2</u>	П	FAC	Troblematic Tryanspriyae Vegetation (Explain)
	<u>2</u>		<u>FAC</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. <u>Carex blanda</u>				Be present, unless disturbed or problematic.
5. <u>Geum canadense</u>	<u>2</u>		FAC	Definitions of Vegetation Strata:
6. Pilea pumila	<u>2</u>		<u>FACW</u>	
7. Galium triflorum	<u>1</u>		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Ulmus americana</u>	<u>1</u>		<u>FACW</u>	at breast height (DBH), regardless of height
9. <u>Viola sp.</u>	<u>1</u>		<u>NI</u>	Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12		П		of size, and woody plants less than 3.28 ft tall.
	<u>29</u>	= Total Cove	r	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cove	r	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet	.) Very nar			buckthorn thicket and scattered lowland
hardwoods.				

Profile Des	scription: (Describe to	tne dep	nn needed to				irirm the al	usenc	e of indicators.)	
Depth	Matrix				Redox Feat			_	_	
(inches)	Color (moist)	<u></u> %	Color (mo	ist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		Texture	Remarks
0-15	10YR 2/2	95	7.5YR 4/6		5	C	PL M	Silt lo		
15-21	10YR 4/2	100						Sand	ly loam	
21-23	10YR 5/2	95	7.5YR 5/6		5	C	PL M	Sand	ly loam	
23+			-							Refusal: Dry soils
				-						
										-
										-
<sup>1</sup> Type: C=0	Concentration, D=Depl	etion, RM	l=Reduced Ma	trix, MS	= Masked S	Sand Grains			<sup>2</sup> Location: PL=Pore	
_	I Indicators:		-							ematic Hydric Soils³:
	Histosol (A1) Histic Epipedon (A2)		L	」 Poly	value Belov <b>MLRA 149</b>	w Surface (S	8) <b>(LRR R,</b>			110) (LRR K, L, MLRA 149B)
	Black Histic (A3)		Г	7 Thir		<b>ь</b> ) ace (S9) <b>(LRF</b>	D MIDA	1/0R		Redox (A16) ( <b>LLR K, L, R</b> ) Peat or Peat (S3) ( <b>LLR K, L, R</b> )
	Hydrogen Sulfide (A4)					Mineral (F1) (		1430		(S7) (LRR K, L)
	Stratified Layers (A5)				my Gleyed		, ,			ow Surface (S8) (LRR K, L)
	Depleted Below Dark S				leted Matrix					face (S9) (LRR K, L)
	Thick Dark Surface (A1				lox Dark Su					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral ( Sandy Gleyed Matrix (		[ [		lox Depress	Surface (F7)				odplain Soils (F19) ( <b>MLRA 149B</b> ) (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Sandy Redox (S5)	54)	L	_ i.ec	iox Depiess	SIO(13 (1 O)			Red Parent M	
	Stripped Matrix (S6)									Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)						☐ Other (Explain	n in Remarks)
31	at the documents of a commentate		and an all broaders la			In an all at	and the state of the state of	. 1. 1		
	of Hydrophytic vegetate Layer (if observed):		vetiand hydroid	gy mus	t be present	i, uniess disti	arbea or pro	obiema	atic.	
	: Dry soils								Hydric Soil Present?	? Yes⊠ No □
	h (inches): <u>23</u>								,	
Remarks:										

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 2 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl, Zofia Noe, Daniel Carter; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): convex Slope (%): 20-30% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: T3K Soil Map Unit Name: Sisson-Casco-Hochheim comlex (SvE) Are climatic/hydrologic conditions on the site typical for this time of year? No 🛛 Yes □ (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No within a Wetland? ☐ Yes ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No If yes, optional Wetland Site ID: PCA No. 2 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Sample area consists of a slightly convex surface between two steep hillslopes. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П 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) П Saturation (A3) П Marl Deposits (B15) Dry-Season Water Table (C2) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water marks (B1) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) П Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) П Sparsely Vegetated Concave Surface (B8) $\boxtimes$ **FAC-Neutral Test (D5) Field Observations:** Surface Water Present? Yes $\square$ No 🛛 Depth (inches): \_ Water Table Present? No 🖂 Depth (inches): \_\_\_\_ Yes □ Saturation Present? Yes No 🛛 Depth (inches): \_\_\_\_\_ **Wetland Hydrology Present?** Yes □ No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
·	<u>% Cover</u> <u>40</u>	Species? ⊠	Status FACW	
1. Fraxinus pennsylvanica	<del>35</del>		FACW	Number of Dominant Species That are OBL, FACW, or FAC: 5 (A)
2. <u>Ulmus americana</u> 3	<u>50</u>		IAOW	Total Number of Dominant
				Species Across All Strata: <u>5</u> (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7				Prevalence Index worksheet:
	<u>75</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Rhamnus cathartica	<u>65</u>	$\boxtimes$	<u>FAC</u>	FACW species x 2 =
2. <u>Ulmus americana</u>	<u>15</u>		<u>FACW</u>	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6		口		Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
· · · —	80	= Total Cove	er	☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)	<del></del>			☐ Prevalence Index is ≤3.0¹
1. Rhamnus cathartica	<u>15</u>	$\boxtimes$	<u>FAC</u>	☐ Morphological Adaptations¹ (Provide supporting
	<u>5</u>		FAC	data in Remarks or on a separate sheet)
2. <u>Aster lateriflorus</u>			FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Ribes americanum	<u>4</u>	_		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Carex blanda	<u>3</u>		<u>FAC</u>	Be present, unless disturbed or problematic.
5. <u>Eupatorium rugosum</u>	<u>3</u>		<u>FACU</u>	Definitions of Vanatation Courts
6. Osmorhiza claytonii	<u>3</u>		<u>FACU</u>	Definitions of Vegetation Strata:
7. Galium triflorum	<u>1</u>		<u>FACU</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Geranium maculatum</u>	<u>1</u>		<u>FACU</u>	at breast height (DBH), regardless of height
9. <u>Ulmus americana</u>	<u>1</u>		<u>FACW</u>	Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>36</u>	= Total Cove	er	Manda di Carante di Ca
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3.				Hydrophytic
4				Vegetation
··· <del></del>	<u>0</u>	= Total Cove		Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet			<u> </u>	
Transactor (monato prioto manuscritorio di on a copanato di con	., _0			

Profile Des	scription: (Describe to	o the dep	th needed to docu	ment the ind	icator or cor	nfirm the a	bsence of indicators.)	Camping Form. <u>z</u>
Depth	Matrix			Redox Feat	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	- Texture	Remarks
0-7	10YR 3/2	100					Silt loam	-
7-10	10YR 3/2	98	7.5YR 4/6			PL M	Silt loam	-
10-17	10YR 5/4	100					Sandy loam	-
17-23	10YR 4/3	100				•	Sandy loam	
17-23	1011( 4/3		-				Sandy Idam	-
						-		
								-
							-	
	Concentration, D=Depl	etion, RM	l=Reduced Matrix, N	MS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore	
-	I Indicators:					o) // == =		ematic Hydric Soils <sup>3</sup> :
	Histosol (A1)		□ P	olyvalue Belo	•	8) <b>(LRR R</b> ,		110) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2) Black Histic (A3)		Пт	MLRA 149 hin Dark Surfa		D D MIDA		Redox (A16) ( <b>LLR K, L, R</b> ) Peat or Peat (S3) ( <b>LLR K, L, R</b> )
	Hydrogen Sulfide (A4)			oamy Mucky I				(S7) (LRR K, L)
	Stratified Layers (A5)			oamy Gleyed		,,		low Surface (S8) (LRR K, L)
	Depleted Below Dark S	Surface (A		epleted Matrix				rface (S9) (LRR K, L)
	Thick Dark Surface (A			Redox Dark Su				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			Depleted Dark				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix ( Sandy Redox (S5)	S4)		Redox Depress	sions (F8)		<ul><li></li></ul>	(TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Stripped Matrix (S6)							Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					n in Remarks)
	` ',		,				_	,
	of Hydrophytic vegetat		etland hydrology m	ust be presen	t, unless dist	urbed or pro	oblematic.	
	Layer (if observed):	:						
Type							Hydric Soil Present	? Yes ☐ No ⊠
	h (inches):							
Remarks:								

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 3 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl, Zofia Noe, and Daniel Carter; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: E1H Soil Map Unit Name: Houghton mucky peat (Hu) Are climatic/hydrologic conditions on the site typical for this time of year? No 🛛 Yes □ (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No within a Wetland? □No Hydric Soils Present? ⊠Yes ∏No Wetland Hydrology Present? ⊠Yes ПNо If yes, optional Wetland Site ID: PCA No. 2 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Sample site area selected as a proposed trail is planned for this area. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П 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) П Saturation (A3) П Marl Deposits (B15) Dry-Season Water Table (C2) Water marks (B1) $\boxtimes$ Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) $\boxtimes$ **Geomorphic Position (D2)** Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) Microtopographic Relief (D4) П Sparsely Vegetated Concave Surface (B8) $\boxtimes$ **FAC-Neutral Test (D5) Field Observations:** Surface Water Present? Yes 🖂 No 🗌 Depth (inches): 2 Water Table Present? Yes 🗌 No □ Depth (inches): Saturation Present? Yes 🗌 No 🗌 Depth (inches): \_\_\_\_\_ **Wetland Hydrology Present?** Yes 🖂 No □ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Sampling Point: 3

Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Indicator Status	Dominance Test worksheet:
1. Fraxinus nigra	<u>70 00 001</u>	<u> </u>	FACW	Number of Dominant Species
2	<del>_</del>			That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
				Species Across All Strata: <u>2</u> (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7				Prevalence Index worksheet:
	<u>70</u>	= Total Cover	-	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4		П		UPL species x 5 =
5				Column Totals: (A) (B)
6		П		Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cover		Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)	_			Dominance Test is >50%     Prevalence Index is ≤3.0¹
1. Phalaris arundinacea	<u>100</u>	$\boxtimes$	<u>FACW</u>	☐ Morphological Adaptations¹ (Provide supporting
2. <u>Carex lacustris</u>	<u>10</u>		OBL	data in Remarks or on a separate sheet)
3				☐ Problematic Hydrophytic Vegetation¹ (Explain)
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				Be present, unless disturbed or problematic.
5				Definitions of Vegetation Strate.
6		П		Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>110</u>	= Total Cover	•	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				no.gri
2.				
3				
4				Hydrophytic Vegetation
4	<u> </u>	= Total Cover		Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet				d hardwoods
Tremains. (include prioto framber fiere of off a separate sheet	.) 1 10011 (W	ot) moadow a	ina iowiai	id Hardwoods.

**SOIL** Sampling Point: <u>3</u>

Profile De	scription: (Describe to	the depth need	ed to docu	ment the ind	icator or con	firm the absenc	e of indicators.)	Camping Forms <u>o</u>
	Matrix			Redox Feat			,	
Depth (inches)	Color (moist)	% Col	or (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
(IIICHES)	Color (moist)	/6 COI	or (moist)		Туре		Texture	Remarks
	·							
	· <del></del>				-			
	· <u></u> -							
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	· <del></del>							
	. <u></u> <u>.</u>							
	·							
	Concentration, D=Deplet	tion, RM=Reduc	ed Matrix, N	MS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore L	
-	il Indicators:						Indicators for Proble	
	Histosol (A1)		☐ P	olyvalue Belo		3) <b>(LRR R,</b>		10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	•			Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3)					R R, MLRA 149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			oamy Mucky I oamy Gleyed		LKK K, L)		(S7) ( <b>LRR K, L</b> ) ow Surface (S8) ( <b>LRR K, L</b> )
	Depleted Below Dark Su	ırface (A11)		epleted Matri				face (S9) <b>(LRR K, L</b> )
	Thick Dark Surface (A12			Redox Dark Su				se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S			epleted Dark				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Se			Redox Depress				(TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Sandy Redox (S5)						☐ Red Parent Ma	
	Stripped Matrix (S6)							Dark Surface (TF12)
	Dark Surface (S7) (LRR	R, MLRA 149B	)				Other (Explain	n in Remarks)
3ladiootoro	of Undrankutia vagatatia	an and watland b		uat ha nraaan	t unlana diatu	urbad ar arablama	.tio	
	of Hydrophytic vegetation Layer (if observed):	on and welland n	ydrology m	ust be presen	t, unless distu	irbed or problema	IIIC.	
	:						Hydric Soil Present?	Yes⊠ No □
	 h (inches):						nyunc son Fresent?	Yes⊠ No □
	Soils inundated with	2 inches of	votor by	drie by defi	nition Crit	orio 3		
Remarks.	Sons inunuated with	i z iriches or v	water, rry	unc by dem	illillori - Crit	ena 3.		

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 4 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl, Zofia Noe, and Daniel Carter; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): toe slope Local relief (concave, convex, none): linear Slope (%): 20-30% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Datum: NWI classification: T3K Soil Map Unit Name: Sisson-Casco-Hoccheim complex (SvE) Are climatic/hydrologic conditions on the site typical for this time of year? Yes No ☑ (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? □Yes ⊠No within a Wetland? ☐ Yes ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No If ves. optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Sample site selected due to a proposed trail in the area and WWI mapping error of T3K. **HYDROLOGY** 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) П Drainage Patterns (B10) Moss Trim Lines (B16) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) П Water marks (B1) П Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) П Drift Deposits (B3) П Presence of Reduced Iron (C4) П Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) П Recent Iron Reduction in Tilled Soils (C6) П Geomorphic Position (D2) П Iron Deposits (B5) Thin Muck Surface (C7) П П П Shallow Aquitard (D3) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) П Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes □ No 🛛 Depth (inches): \_ Water Table Present? Yes 🗌 No 🖂 Depth (inches): Yes 🗌 Saturation Present? No 🛛 Depth (inches): **Wetland Hydrology Present?** Yes $\square$ No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Troe Ctratum (Diet size, 20' redive)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Status 54011	
1. Acer saccharum	<u>60</u>		FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)
2. <u>Tilia americana</u>	<u>35</u>		<u>FACU</u>	mat are OBL, PACW, or PAC. <u>o</u> (A)
3. Quercus rubra	<u>20</u>		<u>FACU</u>	Total Number of Dominant
4				Species Across All Strata: <u>5</u> (B)
5				Percent of Dominant Species
6		П		That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
	<u>115</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Zanthoxylum americanum	<u>10</u>	$\boxtimes$	<u>FACU</u>	FACW species x 2 =
2. Acer saccharum	<u>5</u>	$\boxtimes$	<u>FACU</u>	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				<u> </u>
6				Column Totals: (A) (B)
				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>15</u>	= Total Cove	er	☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)		_		☐ Prevalence Index is ≤3.0¹☐ Morphological Adaptations¹ (Provide supporting
1. Acer saccharum	<u>55</u>	$\boxtimes$	<u>FACU</u>	data in Remarks or on a separate sheet)
2. <u>Galium triflorum</u>	<u>5</u>		<u>FACU</u>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Dactylis glomerata</u>	<u>4</u>		<u>FACU</u>	1 Indicators of hydric call and water discounts as a second
4. <u>Hystrix patula</u>	<u>4</u>		<u>NI</u>	Indicators of hydric soil and wetland hydrology must     Be present, unless disturbed or problematic.
5. Viburnum opulus	<u>4</u>		<u>FACW</u>	
6. Aster lateriflorus	<u>2</u>		<u>FAC</u>	Definitions of Vegetation Strata:
7. Rhamnus cathartica	<u>2</u>		<u>FAC</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. Solidago flexicaulis	<u>2</u>		<u>FACU</u>	at breast height (DBH), regardless of height
9. <u>Geum canadense</u>	<u>1</u>		<u>FAC</u>	Sapling/shrub – Woody plants less than 3in. DBH
10. <u>Hackelia virginiana</u>	<u>1</u>		<u>FACU</u>	and greater than 3.28 ft (1 m) tall.
11. Solidago gigantea	<u>1</u>		<u>FACW</u>	Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>81</u>	= Total Cove	er	Manda vines All woods vines greater than 2.20 ft in
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2		П		
3.				Hydrophytic
4.				Vegetation
··· <del>·</del>	<u>0</u>	= Total Cove		Present? Yes ☐ No ☒
Remarks: (include photo number here or on a separate sheet			,,	
	, -			

Profile Des	scription: (Describe to	the depth	needed to doc	ument the ind	icator or con	firm the a	sence of indicators.)	
Depth	Matrix			Redox Feat	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	- Texture	Remarks
0-10	10YR 2/1	100					Sandy loam	
10+								Refusal: Glacial till
101								Trordodi. Cidolar tili
	·							_
	·							
	· <del></del>							
							·	
¹Type: C=	Concentration, D=Depl	etion, RM=R	Reduced Matrix,	MS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore L	
-	il Indicators:		_				Indicators for Probler	-
	Histosol (A1)			Polyvalue Belo		3) <b>(LRR R,</b>		0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	•			Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)			Thin Dark Surfa Loamy Mucky I			149B) ☐ 5 cm Mucky Pe	eat or Peat (S3) (LLR K, L, R)
	Stratified Layers (A5)			Loamy Gleyed	, , ,	LKK K, L)	•	ow Surface (S8) (LRR K, L)
	Depleted Below Dark S	Surface (A11		Depleted Matrix				ace (S9) (LRR K, L)
	Thick Dark Surface (A1			Redox Dark Su				se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (			Depleted Dark				dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (	54)		Redox Depress	sions (F8)			(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5) Stripped Matrix (S6)						☐ Red Parent Ma☐ Verv Shallow D	aterial (F21) Dark Surface (TF12)
	Dark Surface (S7) (LR	R R. MI RA	149B)				Other (Explain	
	Dank Gariago (Gr) (Erk	,	. 102)					m remaine)
<sup>3</sup> Indicators	of Hydrophytic vegetat	ion and wetl	and hydrology r	nust be presen	t, unless distu	irbed or pro	blematic.	
	e Layer (if observed):							
	: Glacial till						Hydric Soil Present?	Yes 🗌 No 🛚
	h (inches): <u>10</u>							
Remarks:								
l								

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 5 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl, Zofia Noe, and Daniel Carter; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: E1H Soil Map Unit Name: Houghton mucky peat (Hu) Are climatic/hydrologic conditions on the site typical for this time of year? No 🛛 Yes □ (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No within a Wetland? □No Hydric Soils Present? ⊠Yes ∏No ⊠Yes Wetland Hydrology Present? ПNо If yes, optional Wetland Site ID: PCA No. 2 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Wetland sample point in area of proposed trail that will cross the wetland. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П 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) П Saturation (A3) П Marl Deposits (B15) Dry-Season Water Table (C2) ☐ Hydrogen Sulfide Odor (C1) Water marks (B1) Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) $\boxtimes$ **Geomorphic Position (D2)** Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) Microtopographic Relief (D4) П Sparsely Vegetated Concave Surface (B8) $\boxtimes$ **FAC-Neutral Test (D5) Field Observations:** Surface Water Present? Yes 🖂 No 🗌 Depth (inches): 8.5 Water Table Present? Yes 🗌 No □ Depth (inches): Saturation Present? Yes 🗌 No 🗌 Depth (inches): \_\_\_\_\_ **Wetland Hydrology Present?** Yes 🖂 No □ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Sampling Point: 5

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	Species?	<u>Status</u>	
1				Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)
2				That are OBE, I AGW, OF I AG.
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100% (A/B)
				Prevalence Index worksheet:
7				
	<u>0</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cove	۵r	Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)	_	= 10tal 00VC	<b>,</b> 1	Dominance Test is >50%     Prevalence Index is ≤3.0¹
	40	⋈	EAC)A/	☐ Morphological Adaptations¹ (Provide supporting
1. Phalaris arundinacea	<u>10</u>		<u>FACW</u>	data in Remarks or on a separate sheet)
2				☐ Problematic Hydrophytic Vegetation¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
				Be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Definitions of Vegetation Strata.
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8		□		at breast height (DBH), regardless of height
9				Continue (character)
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
				and groater than 6.20 ft (1 m) tail.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>10</u>	= Total Cove	er	Manda di dina All con di dina a manda di dina 2 00 ft in
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				noigh.
2				
3		Ш		Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cove	er	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet	.) Narrow b	and of open	water with	fresh (wet) meadow along the edge.

Profile De	scription: (Describe to	the depth ne	eded to doci	ument the inc	licator or con	firm the absen	e of indicators.)	Camping Form. <u>o</u>
	Matrix			Redox Fea			,	
Depth (inches)	Color (moist)	% (	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
(IIICIICS)	Color (moist)	70 (	zoloi (IIIolst)		Туре		Texture	Remarks
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	Concentration, D=Deplet	tion, RM=Red	uced Matrix,	MS= Masked	Sand Grains		<sup>2</sup> Location: PL=Pore l	
-	Il Indicators:						Indicators for Proble	
	Histosol (A1)		☐ F		ow Surface (St	B) <b>(LRR R,</b>		10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	•			Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3)					R R, MLRA 149E		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			₋oamy Mucky ₋oamy Gleyed	Mineral (F1) (	LKK K, L)		(S7) ( <b>LRR K, L</b> ) ow Surface (S8) ( <b>LRR K, L</b> )
	Depleted Below Dark Su	ırface (A11)		Depleted Matri				face (S9) <b>(LRR K, L</b> )
	Thick Dark Surface (A12			Redox Dark Si				se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S			Depleted Dark				odplain Soils (F19) ( <b>MLRA 149B</b> )
	Sandy Gleyed Matrix (S			Redox Depres				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)						☐ Red Parent M	
	Stripped Matrix (S6)							Dark Surface (TF12)
	Dark Surface (S7) (LRR	R, MLRA 14	9B)				Other (Explain	n in Remarks)
31 11 1								
	of Hydrophytic vegetation	on and wetlan	d hydrology m	nust be preser	nt, unless distu	irbed or problem	atic.	
	Layer (if observed):							× 2 × 5
	: h (inches):						Hydric Soil Present?	P Yes⊠ No □
	Soils inundated with	0 E inchas	ofwotor	budria bud	ofinition C	ritaria 2		
Remarks: 3	Soils inundated with	o.5 inches	or water,	nyanc by a	elinition - C	riteria 3.		

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 6 Applicant/Owner: State: WI Investigator(s): Jen Dietl, Zofia Noe, Dan Carter, Chris Jors; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: E1H Soil Map Unit Name: Houghton mucky peat (Hu) Are climatic/hydrologic conditions on the site typical for this time of year? No 🛛 Yes □ (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No within a Wetland? □No Hydric Soils Present? ⊠Yes ∏No ⊠Yes Wetland Hydrology Present? ПNо If yes, optional Wetland Site ID: PCA No. 2 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Wetland sample point in area of proposed trail that will cross the wetland. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П 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) П Saturation (A3) П Marl Deposits (B15) Dry-Season Water Table (C2) ☐ Hydrogen Sulfide Odor (C1) Water marks (B1) Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) $\boxtimes$ **Geomorphic Position (D2)** Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) Microtopographic Relief (D4) П Sparsely Vegetated Concave Surface (B8) $\boxtimes$ **FAC-Neutral Test (D5) Field Observations:** Surface Water Present? Yes 🖂 No 🗌 Depth (inches): 3 Water Table Present? Yes $\square$ No $\square$ Depth (inches): Saturation Present? Yes 🗌 No $\square$ Depth (inches): \_\_\_\_\_ **Wetland Hydrology Present?** Yes 🖂 No $\square$ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Troe Stratum (Diet aires 201 radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Status 540W	
1. <u>Fraxinus nigra</u>	<u>20</u>		<u>FACW</u>	Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)
2				That are OBL, FACW, or FAC: 4 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>4</u> (B)
5		П		Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100% (A/B)
7				Prevalence Index worksheet:
	<u>20</u>	= Total Cove	or.	Total % Cover of: Multiply by:
Combiner/Cherch Chartery (Diet sines 20) and disco)	_	- 10tai 0010	21	
Sapling/Shrub Stratum (Plot size: 30' radius)	<u>60</u>	$\boxtimes$	FACW	OBL species x 1 =
1. <u>Fraxinus nigra</u>	<u>00</u>		IACW	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
<del></del>	<u>60</u>	= Total Cove	or.	Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)		- 10tai 00V	21	Dominance Test is >50%     Prevalence Index is ≤3.0¹
	<u>50</u>	$\boxtimes$	FACW	☐ Morphological Adaptations¹ (Provide supporting
1. Phalaris arundinacea			OBL	data in Remarks or on a separate sheet)
2. <u>Carex lacustris</u>	<u>20</u>			☐ Problematic Hydrophytic Vegetation¹ (Explain)
Scutellaria lateriflora	<u>5</u>		<u>OBL</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. <u>Impatiens capensis</u>	<u>3</u>		<u>FACW</u>	Be present, unless disturbed or problematic.
5. Aster ontarionis	<u>2</u>		<u>FAC</u>	
6. Boehmeria cylindrica	<u>2</u>		<u>OBL</u>	Definitions of Vegetation Strata:
7. Pilea fontana	<u>1</u>		<u>FACW</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Pilea pumila</u>	<u>1</u>		<u>FACW</u>	at breast height (DBH), regardless of height
9. <u>Symplocarpua foetidus</u>	<u>1</u>		<u>OBL</u>	Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11.		$\overline{\Box}$		
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12.	<u>85</u>	= Total Cove		of size, and woody plants less than 5.20 ft tail.
Washalf as Obstant (Distrains Coloration)	<u>00</u>	- Total Cove	71	Woody vines - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cove	er	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet	.) Fresh (w	et) meadow	with saplir	ng and mature hardwoods.

Profile Des	scription: (Describe to	the depth	needed to docur			firm the absen	ce of indicators.)	
Depth	Matrix			Redox Fea				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
				_				
				_				-
,								
						-		
					· <del></del>			
	Concentration, D=Deple	etion, RM=R	educed Matrix, M	IS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore	
-	I Indicators:			. I I D . I.		0) <b>(I DD D</b>	Indicators for Proble	
	Histosol (A1) Histic Epipedon (A2)		∐ Po	oiyvalue Belo MLRA 149	w Surface (S	8) (LRR R,		10) <b>(LRR K, L, MLRA 149B</b> ) Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3)		□ть		,	R R, MLRA 1491		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (			(S7) (LRR K, L)
	Stratified Layers (A5)			amy Gleyed		, ,		ow Surface (S8) (LRR K, L)
	Depleted Below Dark S			epleted Matri				face (S9) (LRR K, L)
	Thick Dark Surface (A1			edox Dark Su				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (				Surface (F7)			odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S Sandy Redox (S5)	o4)	∐ R€	edox Depress	sions (F8)		☐ Red Parent M	(TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Stripped Matrix (S6)							Dark Surface (TF12)
	Dark Surface (S7) <b>(LRF</b>	R, MLRA	1 <b>49B</b> )					in in Remarks)
	of Hydrophytic vegetati	on and wetla	and hydrology mu	ıst be presen	ıt, unless distu	urbed or problem	natic.	
	Layer (if observed):							
	(						Hydric Soil Present?	? Yes⊠ No □
	n (inches):	0 ' 1	. <b></b>	L				
Remarks: S	Soils inundated with	n 3 inches	of water, hyd	iric by defi	nition - Crit	eria 3.		
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### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 7 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl and Zofia Noe; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): linear Slope (%): 20-30% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: T3K Soil Map Unit Name: Sisson-Casco-Hochheim complex (SvE) Are climatic/hydrologic conditions on the site typical for this time of year? No 🛚 (If no, explain in Remarks) Yes □ Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ☐Yes $\boxtimes$ No within a Wetland? ☐ Yes ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No If yes, optional Wetland Site ID: PCA No. 1 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Sample site selected due to a proposed trail in the area and WWI mapping error of T3K. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П Surface Soil Cracks (B6) Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) П Saturation (A3) П Marl Deposits (B15) Dry-Season Water Table (C2) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water marks (B1) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) П Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) Microtopographic Relief (D4) П Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes 🗌 No 🛛 Depth (inches): \_ Water Table Present? No 🖂 Depth (inches): \_\_\_\_ Yes 🗌 Saturation Present? Yes 🗌 No 🛛 Depth (inches): \_\_\_\_\_ **Wetland Hydrology Present?** Yes □ No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Indicator Status	Dominance Test worksheet:
1. Acer saccharum	<u>50</u>	<u>Species:</u>	FACU	Number of Dominant Species
2. Fagus grandifolia	<u>40</u>	$\boxtimes$	FACU	That are OBL, FACW, or FAC: <u>0</u> (A)
Ostrya virginiana	<u>20</u>		FACU	Total Number of Dominant
4	_			Species Across All Strata: <u>6</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
·· <u>—</u>	110	= Total Cove	<del></del>	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		_ 10tal 00v0	•	OBL species x 1 =
1. Acer saccharum	<u>10</u>	$\boxtimes$	<u>FACU</u>	FACW species x 2 =
2. Fagus grandifolia	<u> </u>	$\boxtimes$	FACU	FAC species x 3 =
	-			
3				FACU species x 4 =
4 5				UPL species x 5 = (A) (B)
6				Column Totals: (A) (B)  Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7	15			☐ Rapid Test for Hydrophytic Vegetation
11 1 0 1 (D) 1 (D) 1 (D)	<u>15</u>	= Total Cove	r	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)	<b>E</b> 0	$\square$	NII	☐ Prevalence Index is ≤3.0¹☐ Morphological Adaptations¹ (Provide supporting
1. <u>Carex pensylvanica</u>	<u>50</u>		<u>NI</u>	data in Remarks or on a separate sheet)
2. Acer saccharum	<u>40</u>		FACU	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. Rhamnus cathartica	<u>5</u>		<u>FAC</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Aster ontarionis	<u>2</u>	П	<u>FAC</u>	Be present, unless disturbed or problematic.
5. <u>Fagus grandifolia</u>	<u>2</u>		<u>FACU</u>	
6		П		Definitions of Vegetation Strata:
7		口		Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10		П		and greater than 3.28 ft (1 m) tall.
11				Hart All hart areas (and a second a second as a second as a
12				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>99</u>	= Total Cove	r	ν ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in
1		П		height
2.				
2				
3				Hydrophytic Vegetation
4				Present? Yes ☐ No ☒
Decreasive (include wheth remarks have an an account sheet	<u>0</u>	= Total Cove	<u> </u>	
Remarks: (include photo number here or on a separate sheet	.) Opianu n	iai uwoous.		

Profile Des	scription: (Describe t	o the dep	th needed to docun	nent the ind	licator or con	firm the a	bsence of indicators.)	
Depth Matrix		Redox Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	– Texture	Remarks
0-5	10YR 2/2	100					Silt loam	-
5-14	10YR 4/4	95	7.5YR 4/6	5	С	М	Clay	-
14-16	10YR 5/6	95	7.5YR 5/8	5	C	M	Gravelly sandy loam	-
16+								Refusal: Glacial till material
								-
								-
				-				
				-				
								-
	· <del></del>		-		· <del></del> -			
								-
					· <del></del> -			<u> </u>
¹Type: C=0	Concentration, D=Dep	letion, RM	I=Reduced Matrix, M	S= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore	Lining, M=Matrix
	il Indicators:	. ,						ematic Hydric Soils <sup>3</sup> :
	Histosol (A1)		☐ Po	•	w Surface (S8	3) <b>(LRR R</b> ,		A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,			Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3) Hydrogen Sulfide (A4)				ace (S9) <b>(LRF</b> Mineral (F1) (l			Peat or Peat (S3) ( <b>LLR K, L, R</b> ) e (S7) ( <b>LRR K, L</b> )
	Stratified Layers (A5)			amy Gleyed		LKK K, L)		elow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (A		pleted Matri				irface (S9) <b>(LRR K, L</b> )
	Thick Dark Surface (A			dox Dark Su				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)			oodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (	(S4)	☐ Re	dox Depress	sions (F8)			c (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5) Stripped Matrix (S6)							Material (F21) Dark Surface (TF12)
	Dark Surface (S7) (LR	R R. MLF	RA 149B)					in in Remarks)
	Dank Ganago (G7) (En	,					Guioi (Explai	Transcription (Control of the Control of the Contro
	of Hydrophytic vegeta		etland hydrology mu	st be presen	ıt, unless distu	irbed or pr	oblematic.	
	Layer (if observed)	:						
	: Glacial till						Hydric Soil Present	? Yes 🗌 No 🛛
	h (inches): <u>16</u>							
Remarks:								

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 8 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl and Zofia Noe; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): toe slope Local relief (concave, convex, none): linear Slope (%): 20-30% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: T3K Soil Map Unit Name: Sisson-Casco-Hoccheim complex (SvE) No 🛛 Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in Remarks) Yes □ Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? □Yes ⊠No within a Wetland? ☐ Yes ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No If yes, optional Wetland Site ID: PCA No. 1 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Sample site selected due to a proposed trail in the area and WWI mapping error of T3K. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П Surface Soil Cracks (B6) Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) П Saturation (A3) П Marl Deposits (B15) Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) П Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) П Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes $\square$ No 🛛 Depth (inches): \_ Water Table Present? No 🖂 Depth (inches): \_\_\_\_ Yes $\square$ Saturation Present? Yes No 🛛 Depth (inches): \_\_\_\_\_ **Wetland Hydrology Present?** Yes □ No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant	Indicator	Dominance Test worksheet:
1. Tilia americana	40	Species? ⊠	Status FACU	Number of Dominant Species
	<u>20</u>		FACU	That are OBL, FACW, or FAC: 1 (A)
Acer saccharum     Fraxinus americana	<u>10</u>		<u>FACU</u>	Total Number of Dominant
<u></u>	<u>10</u>		<u>1 A00</u>	Species Across All Strata: $8 (B)$
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 13% (A/B)
6 7				Prevalence Index worksheet:
<i>1</i>	70			
	<u>70</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)	40	M	FACIL	OBL species x 1 =
1. Fraxinus americana	<u>10</u>		FACU	FACW species x 2 =
2. Rubus occidentalis	<u>5</u>		<u>NI</u>	FAC species x 3 =
3			—	FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation
	<u>15</u>	= Total Cov	er	☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)		_		Prevalence Index is ≤3.0¹
1. Acer saccharum	<u>50</u>	$\boxtimes$	<u>FACU</u>	☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Eupatorium rugosum</u>	<u>10</u>	$\boxtimes$	<u>FACU</u>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. Rhamnus cathartica	<u>10</u>	$\boxtimes$	<u>FAC</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Ribes cynosbati	<u>10</u>	$\boxtimes$	<u>FACU</u>	Be present, unless disturbed or problematic.
5. Osmorhiza claytonii	<u>8</u>	П	<u>FACU</u>	
6. Berberbis thunbergii	<u>5</u>		<u>FACU</u>	Definitions of Vegetation Strata:
7. Circaea lutetiana	<u>5</u>	П	<u>FACU</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. Prunus serotina	<u>5</u>		<u>FACU</u>	at breast height (DBH), regardless of height
9. <u>Carex blanda</u>	<u>3</u>		<u>FAC</u>	Sapling/shrub – Woody plants less than 3in. DBH
10. Galium triflorum	<u>3</u>	П	<u>FACU</u>	and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>109</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2.		П		
3.		П		Hydrophytic
4		П		Vegetation
··· <u></u>	0	= Total Cov	er	Present? Yes ☐ No ⊠
Remarks: (include photo number here or on a separate sheet			<u> </u>	
	•			

Profile De	scription: (Describe t	o the dep	oth needed to do	cument the ind	licator or cor	firm the a	bsence of indicators.)	
Depth	Matrix Redox Features							
(inches)	Color (moist)	%	Color (mois	t) %	Type <sup>1</sup>	Loc <sup>2</sup>	 Texture	Remarks
0-9	10YR 2/1	100					Loam	
9-16	10YR 3/1	100		-			Sand	
16-19	10YR 4/1	98	5Y 6/6	2	C	M	Sand	with disintegrating dolomite
19+					·		-	Refusal: Dry sand
	-					-		
	-							
					· <del></del>		-	
	·						. —————————————————————————————————————	<del>-</del> -
	<del>-</del>	-			· <del></del>		. ————	
¹Type: C=	Concentration, D=Dep	letion. RM	/=Reduced Matri	x, MS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore	Lining, M=Matrix
	il Indicators:	,		,				lematic Hydric Soils <sup>3</sup> :
	Histosol (A1)			Polyvalue Belo		8) <b>(LRR R,</b>		A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	•			Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3) Hydrogen Sulfide (A4)		님	Thin Dark Surf				Peat or Peat (S3) ( <b>LLR K, L, R</b> ) e (S7) ( <b>LRR K, L</b> )
	Stratified Layers (A5)			Loamy Gleyed	. , ,	LKK K, L)		elow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (A		Depleted Matri				urface (S9) (LRR K, L)
	Thick Dark Surface (A		, <u> </u>	Redox Dark Su				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			Depleted Dark				oodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (	S4)		Redox Depress	sions (F8)			c (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5) Stripped Matrix (S6)							Material (F21) Dark Surface (TF12)
	Dark Surface (S7) (LR	R R. MLF	RA 149B)					in in Remarks)
	( ) <b>(</b> )	<b>,</b>	,				<u> </u>	,
	of Hydrophytic vegeta		vetland hydrology	/ must be presen	ıt, unless disti	urbed or pr	oblematic.	
	e Layer (if observed)	:						
	: <u>Dry sand</u>						Hydric Soil Present	? Yes ☐ No ☒
Remarks:	h (inches): <u>19</u>							
Nemaiks.								

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 9 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl and Zofia Noe; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: T3K Soil Map Unit Name: Houghton mucky peat (Hu) Are climatic/hydrologic conditions on the site typical for this time of year? No 🖂 Yes □ (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No within a Wetland? □No Hydric Soils Present? ⊠Yes ∏No Wetland Hydrology Present? ⊠Yes ПNо If yes, optional Wetland Site ID: PCA No. 2 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П 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) П $\boxtimes$ Saturation (A3) П Marl Deposits (B15) $\boxtimes$ **Dry-Season Water Table (C2)** ☐ Hydrogen Sulfide Odor (C1) Water marks (B1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) П Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes $\square$ No 🛛 Depth (inches): Water Table Present? No 🗌 Yes 🖂 Depth (inches): 15 Saturation Present? Yes 🖂 No 🗌 Depth (inches): 0 (at surface) **Wetland Hydrology Present?** Yes 🖂 No $\square$ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover 30	Species? ☑	Status FACW	
1. Fraxinus pennsylvanica	<u>50</u>		IACW	Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)
2				
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				Opecies Across Air Strata.
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100% (A/B)
7				Prevalence Index worksheet:
	<u>30</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Cornus amomum	<u>10</u>	$\boxtimes$	<b>FACW</b>	FACW species x 2 =
2		П		FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				, and the second
6				Column Totals: (A) (B)  Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7	40			☐ Rapid Test for Hydrophytic Vegetation
	<u>10</u>	= Total Cove	er	□ Dominance Test is >50%     □ 2.21
Herb Stratum (Plot size: 5' radius)	00	<b>5</b> 7	ODI	☐ Prevalence Index is ≤3.0¹☐ Morphological Adaptations¹ (Provide supporting
1. <u>Boehmeria cylindrica</u>	<u>30</u>		<u>OBL</u>	data in Remarks or on a separate sheet)
2. Glyceria striata	<u>30</u>	$oxed{\boxtimes}$	<u>OBL</u>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Pilea fontana</u>	<u>15</u>		<u>FACW</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Pilea pumila	<u>15</u>		<u>FACW</u>	Be present, unless disturbed or problematic.
5. <u>Impatiens capensis</u>	<u>10</u>	П	<u>FACW</u>	
6. Stachys tenuifolia	<u>10</u>		<u>FACW</u>	Definitions of Vegetation Strata:
7. Aster lateriflorus	<u>5</u>		FAC	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. Symplocarpus foetidus	<u>5</u>		OBL	at breast height (DBH), regardless of height
9	_			
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
				and greater than 6.25 ft (1 fil) tall.
11		_		Herb - All herbaceous (non-woody) plants, regardless
12	400	<u></u>		of size, and woody plants less than 3.28 ft tall.
	<u>120</u>	= Total Cove	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4		$\Box$		Vegetation
	<u>0</u>	= Total Cove	er	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet.	) Fresh (w	et) meadow v	with scatte	ered lowland shrubs and hardwoods.

SOIL Sampling Point: 9

	Matrix			Redox Fea	itures			of indicators.)	
Depth			0-1/			12	_	Tandona	Daniela
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		Texture	Remarks
0-20	10YR 2/1	100					Muck		
								_	
					-				
				· ·			. —	_	
				<del></del>	· ——			_	
					· ——				
¹Type: C=0	Concentration, D=Deple	etion. RM=I	Reduced Matrix	MS= Masked	Sand Grains		:	<sup>2</sup> Location: PL=Pore I	Lining, M=Matrix
	I Indicators:								ematic Hydric Soils <sup>3</sup> :
-	Histosol (A1)			Polyvalue Belo	w Surface (S	8) <b>(LRR R</b> ,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149				☐ Coast Prairie I	Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3)			Thin Dark Surf			149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			Loamy Mucky		LRR K, L)			(S7) ( <b>LRR K, L</b> )
	Stratified Layers (A5)			Loamy Gleyed					ow Surface (S8) (LRR K, L)
	Depleted Below Dark S			Depleted Matri					face (S9) (LRR K, L)
	Thick Dark Surface (A1			Redox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral ( Sandy Gleyed Matrix (			Depleted Dark Redox Depres					odplain Soils (F19) ( <b>MLRA 149B</b> ) (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Sandy Redox (S5)	34)		Redux Deples	Sioris (Fo)			Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LRI	D D MIDA	4400)					☐ Other (Explain	
	Daik Sullace (S1) (LIKI	IN IN, IVILINA	. 149B)						i ili Kelilaiks)
	Dark Surface (S7) (EK)	IX IX, WILIXA	. 149B)					Other (Explain	riii Remarks)
<sup>3</sup> Indicators	of Hydrophytic vegetat	ion and wet		must be preser	nt, unless dist	urbed or pr	oblemat		riii Kemaiks)
<sup>3</sup> Indicators Restrictive	of Hydrophytic vegetate Layer (if observed):	ion and wet		must be preser	nt, unless dist	urbed or pr	oblemat		TIII Remarks)
<sup>3</sup> Indicators <b>Restrictive</b> Type:	of Hydrophytic vegetate Layer (if observed):	ion and wet		must be preser	nt, unless dist	urbed or pr			· 
<sup>3</sup> Indicators <b>Restrictive</b> Type:	of Hydrophytic vegetate Layer (if observed):	ion and wet		must be preser	nt, unless dist	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type:	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless dist	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless dist	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless dist	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless dist	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless dist	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type:  Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type:  Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 
<sup>3</sup> Indicators <b>Restrictive</b> Type: Depth	of Hydrophytic vegetate Layer (if observed):	ion and wet		nust be preser	nt, unless distr	urbed or pr		ic.	· 

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 10 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl and Zofia Noe; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): small berm Local relief (concave, convex, none): convex Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Datum: NWI classification: none Soil Map Unit Name: Houghton mucky peat (Hu) Are climatic/hydrologic conditions on the site typical for this time of year? Yes □ No 🛛 (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ☐Yes $\boxtimes$ No within a Wetland? ☐ Yes ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No If yes, optional Wetland Site ID: PCA No. 1 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Sample site is on a berm approximately 8 feet wide that separates a small isolated wetland from the main wetland to the north. It's possible that this "berm" was part of the old railroad system that traverses the project area. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) П Saturation (A3) П Marl Deposits (B15) Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) П Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) ☐ Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) П Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes $\square$ No 🛛 Depth (inches): \_ Water Table Present? No 🖂 Depth (inches): \_\_\_\_ Yes $\square$ Saturation Present? Yes 🗌 No 🛛 Depth (inches): \_\_\_\_\_ **Wetland Hydrology Present?** Yes □ No 🏻 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover 30	Species? ⊠	Status FACU	
1. <u>Tilia americana</u>	<u> </u>		<u>1 ACC</u>	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)
2				
3				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
4				
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
	<u>30</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Fraxinus pennsylvanica	<u>3</u>		<u>FACW</u>	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7	<u> </u>			☐ Rapid Test for Hydrophytic Vegetation
Harb Otrature (Plateine, Floredine)	<u>ა</u>	= Total Cove	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)	EO	$\square$	FACIL	☐ Prevalence Index is ≤3.0¹☐ Morphological Adaptations¹ (Provide supporting
1. Eupatorium rugosum	<u>50</u>		FACU	data in Remarks or on a separate sheet)
2. Acer saccharum	<u>20</u>		FACU	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Aster ontarionis</u>	<u>10</u>		<u>FAC</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Circaea lutetiana	<u>10</u>		<u>FACU</u>	Be present, unless disturbed or problematic.
5. <u>Viola sp.</u>	<u>10</u>		<u>NI</u>	
6. Osmorhiza claytonii	<u>5</u>		<u>FACU</u>	Definitions of Vegetation Strata:
7. Soidago gigantea	<u>5</u>		<u>FACW</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. Rhamnus cathartica	<u>3</u>		FAC	at breast height (DBH), regardless of height
9. <u>Carex blanda</u>	<u>1</u>		FAC	Sapling/shrub – Woody plants less than 3in. DBH
10. Fraxinus pennsylvanica	<u>1</u>	П	FACW	and greater than 3.28 ft (1 m) tall.
11. Galium triflorum	1		FACU	
12	_			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12.	116	= Total Cove		of size, and woody plants less than 3.20 it tall.
Manda Vina Chraham (Dish sina 20) radius)	<u></u>	= 10tal 00V6	<b>21</b>	Woody vines - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3		Ц.		Hydrophytic
4				Vegetation   Present? Yes
	<u>0</u>	= Total Cove	er	Tresent: 103 🗀 NO 🖂
Remarks: (include photo number here or on a separate sheet	) Upland har	dwoods.		

Profile Des	scription: (Describe t	to the dep	th needed to docu	ment the ind	icator or cor	nfirm the a	bsence of indicators.)		
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	emarks
-6	10YR 2/1	100					Sandy loam		
-12	10YR 3/2	49	7.5YR 4/6	2	С	PL M	Sandy loam		
	10YR 4/3	49							
2-19	10YR 2/1	100					Sandy clay loam		
9-20	10YR 4/2	80					Sand		
	10YR 2/1	20		_				<del></del> , -	
0+							Sand	Refusal: dry s	and
	-							<u> </u>	
							-	_	
	-	-							
			-					<u> </u>	
		-	-						
ype: C=0	Concentration, D=Dep	letion, RM	1=Reduced Matrix, N	//S= Masked S	Sand Grains		<sup>2</sup> Location: PL=Por	e Lining, M=Matri	x
	il Indicators:						Indicators for Prob	-	
	Histosol (A1)		□ P	olyvalue Belo		8) <b>(LRR R</b> ,		(A10) (LRR K, L,	
	Histic Epipedon (A2) Black Histic (A3)		Пт	MLRA 149 hin Dark Surfa	,	D D MI D A		e Redox (A16) ( <b>L</b> l Peat or Peat (S3	
	Hydrogen Sulfide (A4)	)		oamy Mucky I				e (S7) ( <b>LRR K, L</b> )	
	Stratified Layers (A5)	,		oamy Gleyed		(, -,		elow Surface (S8)	
	Depleted Below Dark	Surface (A		epleted Matrix				urface (S9) (LRR	
	Thick Dark Surface (A			ledox Dark Su				nese Masses (F12	
	Sandy Mucky Mineral			epleted Dark				loodplain Soils (F	
	Sandy Gleyed Matrix Sandy Redox (S5)	(S4)	□ R	ledox Depress	sions (F8)			ic (TA6) ( <b>MLRA 1</b> Material (F21)	44A, 145, 149B)
	Stripped Matrix (S6)							w Dark Surface (T	F12)
	Dark Surface (S7) (LF	RR R, MLF	RA 149B)					ain in Remarks)	,
	of Hydrophytic vegeta		vetland hydrology m	ust be presen	t, unless dist	urbed or pr	oblematic.		
	Layer (if observed)	):					Hudria Cail Drasan	V 🗆	No M
	: <u>Dry sand</u> h (inches): <u>20</u>						Hydric Soil Presen	nt? Yes □	No 🛚
temarks:	11 (IIICHES). <u>20</u>								
omano.									

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 11 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl and Zofia Noe; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Local relief (concave, convex, none): concave Landform (hillslope, terrace, etc.): low terrace Slope (%): 20-30% Subregion (LRR or MLRA): LRR K Long: \_ Datum: NWI classification: none Soil Map Unit Name: Sisson-Casco-Hochhein complex (SvE) Are climatic/hydrologic conditions on the site typical for this time of year? No 🛚 Yes (If no, explain in Remarks) Are "Normal Circumstances" present? Yes ⊠ Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No within a Wetland? □No Hydric Soils Present? ⊠Yes □No Wetland Hydrology Present? ⊠Yes □No If ves, optional Wetland Site ID: PCA No. 2 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. Sample area was selected due to proposed trails in the area. **HYDROLOGY** 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) П Moss Trim Lines (B16) Saturation (A3) П Marl Deposits (B15) $\boxtimes$ **Dry-Season Water Table (C2)** П ☐ Hydrogen Sulfide Odor (C1) Water marks (B1) Crayfish Burrows (C8) П П Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) $\boxtimes$ Geomorphic Position (D2) Iron Deposits (B5) П Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) $\boxtimes$ **FAC-Neutral Test (D5)** Field Observations: Surface Water Present? Yes No 🛛 Depth (inches): Water Table Present? No 🗌 Yes 🛚 Depth (inches): 17 Saturation Present? Yes 🖂 No 🗌 Depth (inches): 14 **Wetland Hydrology Present?** Yes 🛛 No 🗌 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. Tilia americana	% Cover 20	Species? ⊠	Status FACU	
	<u></u>		<u>1 A00</u>	Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)
2				,
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)
6				
7				Prevalence Index worksheet:
	<u>20</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Fraxinus pennsylvanica	<u>5</u>	$\boxtimes$	<u>FACW</u>	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6		П		Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>5</u>	= Total Cov	er	☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)	_			Prevalence Index is ≤3.0¹
1. Boehmeria cylindrica	<u>10</u>	$\boxtimes$	<u>OBL</u>	☐ Morphological Adaptations¹ (Provide supporting
2. Fraxinus pennsylvanica	<u>10</u>	$\boxtimes$	FACW	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
3. Aster ontarionis	<u></u> <u>5</u>		FAC	Troblematic Hydrophytic vegetation (Explain)
			FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. <u>Pilea pumila</u>	<u>5</u>			Be present, unless disturbed or problematic.
5. Ribes americanum	<u>5</u>		<u>FACW</u>	Definitions of Vegetation Strata:
6				Definitions of Vegetation Strata.
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>35</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				ino-grid
2.		П		
3.				Hodeschodie
4.				Hydrophytic Vegetation
<u>-</u>	<u>0</u>	= Total Cov	<u></u>	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet				lwoods
Tromanio. (include priote manipel note of on a coparate choose	., Oman we	,	mana nare	

SOIL Sampling Point: 11

Depth	scription. (Describe to	the dep	tn needed to	aooanne	nt the mai	cator or con	firm the al	sence	of indicators.)		
	Matrix			R	edox Feat	ures					
(inches)	Color (moist)	%	Color (mo	oist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		Texture	Re	emarks
0-14	N 1/0	100			_		_	Muck	-		
14-19	N 1/0	100						Clay Id	pam		
19-20	10YR 5/1	98	10YR 5/6		2	С	M	Sand			
	-		-								
				-							
	-										
				<del></del>							
				<del></del> -							
	<del>.</del>								-		
	<u> </u>										
	<u> </u>										
17	Occasionation B. Borni	-C DM	L De desed Me	1 NAO	Martine	) 1 O '		2	Landa BL Banklin	M. M-1-2	
	Concentration, D=Deplil Indicators:	etion, RM	=Keduced Ma	trix, MS=	iviasked S	and Grains			Location: PL=Pore Lini		
-	Histosol (A1)		Γ	7 Polv	/alue Belov	w Surface (S8	3) (LRR R.	"	2 cm Muck (A10)	•	
	Histic Epipedon (A2)		_		MLRA 149		, (=::::,		☐ Coast Prairie Rec		
	Black Histic (A3)			Thin	Dark Surfa	ace (S9) (LRF	R, MLRA	149B)	☐ 5 cm Mucky Peat	or Peat (S3)	(LLR K, L, R)
	Hydrogen Sulfide (A4)					Mineral (F1) (I	LRR K, L)		☐ Dark Surface (S7		
	Stratified Layers (A5)	Surface (A	L (44) [			Matrix (F2)			Polyvalue Below		
	Depleted Below Dark S Thick Dark Surface (A		(11) [		eted Matrix ox Dark Su				☐ Thin Dark Surface☐ Iron-Manganese		
	Sandy Mucky Mineral					Surface (F7)			☐ Piedmont Floodp		
	Sandy Gleyed Matrix (				x Depress				☐ Mesic Spodic (TA		
	Sandy Redox (S5)								Red Parent Mate		
	Stripped Matrix (S6)		A 440D)						☐ Very Shallow Dar		F12)
	Dark Surface (S7) (LR	K K, WILK	.A 149D)						Other (Explain in	Remarks)	
3Indicators	of Hydrophytic vegetat	ion and w	etland hydrolo	gy must	be present	t, unless distu	rbed or pro	blemati	C.		
	e Layer (if observed):				<u> </u>		·				
	e:							н	ydric Soil Present?	Yes ⊠	No 🗌
Dept	th (inches):										
Remarks:											
1											

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Lac Lawrann Conservancy Prop. Trail Expan. City/County: City of West Bend/Washington County Sampling Date: 10/08/2014 Sampling Point: 12 Applicant/Owner: State: WI Investigator(s): Jennifer Dietl and Zofia Noe; SEWRPC Section, Township, Range: SE 1/4 Section 1, T11N, R19E Landform (hillslope, terrace, etc.): low terrace Local relief (concave, convex, none): none Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Lat: Long: \_\_\_\_\_ Datum: NWI classification: T3K Soil Map Unit Name: Houghton mucky peat (Hu) Are climatic/hydrologic conditions on the site typical for this time of year? No 🖂 Yes □ (If no, explain in Remarks) Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ⊠ No 🗌 Are Vegetation\_\_\_\_\_, Soil\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If, needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No within a Wetland? □No Hydric Soils Present? ⊠Yes ∏No Wetland Hydrology Present? ⊠Yes ПNо If yes, optional Wetland Site ID: PCA No. 2 Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal for the previous 90 days. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) П 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) П $\boxtimes$ Saturation (A3) П Marl Deposits (B15) $\boxtimes$ Dry-Season Water Table (C2) Hydrogen Sulfide Odor (C1) Water marks (B1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) П Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) $\boxtimes$ Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) П Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes $\square$ No 🛛 Depth (inches): Water Table Present? Yes 🖂 No 🗌 Depth (inches): 18 Saturation Present? Yes 🖂 No 🗌 Depth (inches): 4 **Wetland Hydrology Present?** Yes 🖂 No $\square$ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soil Survey map (Exhibit 3), aerial photos (Exhibit 4). Remarks:

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
1. Tilia americana	% Cover 30	<u>Species?</u> ⊠	Status FACU	Number of Dominant Species
2	_		<u>v</u>	That are OBL, FACW, or FAC: 4 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>6</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 67% (A/B)
7				Prevalence Index worksheet:
·· <u></u>	<u>30</u>	= Total Cove		
Cooling/Chrush Ctrotum (Diot circs 20) radius)	<u>50</u>	- Total Cove	<b>5</b> 1	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)	<u>10</u>	$\boxtimes$	FACU	OBL species x 1 =
1. Zanthoxylum americanum			FACW	FACW species x 2 =
2. Fraxinus pennsylvanica	<u>5</u>			FAC species x 3 =
3. Rhamnus cathartica	<u>5</u>		<u>FAC</u>	FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>20</u>	= Total Cove	er	□ Dominance Test is >50%
Herb Stratum (Plot size: <u>5' radius</u> )	05	<b>5</b> 7	ODI	☐ Prevalence Index is ≤3.0¹☐ Morphological Adaptations¹ (Provide supporting
1. Glyceria striata	<u>65</u>		OBL 540	data in Remarks or on a separate sheet)
2. <u>Aster ontarionis</u>	<u>15</u>		<u>FAC</u>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Boehmeria cylindrica</u>	<u>14</u>		<u>OBL</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Solanum dulcamara	<u>10</u>		<u>FAC</u>	Be present, unless disturbed or problematic.
5. <u>Viola sp.</u>	<u>9</u>		<u>NI</u>	
6. Cinna arundinacea	<u>6</u>		<u>FACW</u>	Definitions of Vegetation Strata:
7. Solidago gigantea	<u>6</u>		<u>FACW</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Geum canadense</u>	<u>4</u>		<u>FAC</u>	at breast height (DBH), regardless of height
9. <u>Pilea pumila</u>	<u>1</u>		<u>FACW</u>	Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Harb All barbassaus (non woody) plants, regardless
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>130</u>	= Total Cove	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1. Vitis riparia	<u>7</u>	$\boxtimes$	FAC	
2				
3.	-			Hydrophytic
4.	-			Vegetation
<del></del>	<u>7</u>	= Total Cove	er	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet.				ered shrubs and hardwoods.

<b>OIL</b>										Sampling Po	oint: <u>12</u>	
Profile Des	scription: (Describe t	o the dep	th needed to	docur	ment the indi	cator or cor	nfirm the a	bsence	of indicators.)			
Depth	Matrix				Redox Feat	ıres						
(inches)	Color (moist)	%	Color (mo	oist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		Texture	Re	emarks	
0-4	10YR 2/1	100						Muck	y loam			
4-9	10YR 5/2	69	7.5YR 5/8		2	С	PL M	Silt lo	am			
	10YR 3/1	29										
9-18	N 1/0	98	5YR 4/6		2	С	PL M	Silty	clay loam			
18-23	10YR 2/1	50						Muck				
	N 1/0	50										
23-26	10YR 5/1	95	10YR 5/6		5	С	PL M	Fine	sand			
26-28	N 1/0	100						Muck				
	Concentration, D=Dep	letion, RM	1=Reduced Ma	atrix, M	IS= Masked S	and Grains			<sup>2</sup> Location: PL=Pore Lini			
-	I Indicators:		Г	⊐ в.	aharahia Balay	v Curfoco (C	0\ <b>/  DD D</b>		ndicators for Problema			40B)
	Histosol (A1) Histic Epipedon (A2)		L	Po	olyvalue Belov MLRA 149I		8) <b>(LKK K,</b>		☐ 2 cm Muck (A10) ☐ Coast Prairie Red	•		
	Black Histic (A3)			☐ Th	nin Dark Surfa	,	R R, MLRA	149B)	5 cm Mucky Pear			
	Hydrogen Sulfide (A4)			⊠ Lo	oamy Mucky	Mineral (F1)			□ Dark Surface (S7	7) (LRR K, L)	1	
	Stratified Layers (A5)	o	-		oamy Gleyed I				Polyvalue Below			(, L)
	Depleted Below Dark : Thick Dark Surface (A		_		<b>epleted Matri</b> : edox Dark Sur				☐ Thin Dark Surfac☐ Iron-Manganese			KID)
	Sandy Mucky Mineral				epleted Dark Sui				☐ Piedmont Floodp			
	Sandy Gleyed Matrix (				edox Depress				☐ Mesic Spodic (TA	A6) (MLRA 14		
	Sandy Redox (S5)								Red Parent Mate		>	
	Stripped Matrix (S6) Dark Surface (S7) (LR	DD MIE	2 A 1/10R)						☐ Very Shallow Da		F12)	
	Dark Surface (S7) (EN	ii ix, ivilli	(A 149D)						☐ Other (Explain in	itemarks)		
	of Hydrophytic vegeta		vetland hydrolo	ogy mu	ust be present	, unless dist	urbed or pro	oblema	tic.			
	Layer (if observed)	:										
Type	· · · · · · · · · · · · · · · · · · ·							Į.	Hydric Soil Present?	Yes ⊠	No [	コー
Depti Remarks:	h (inches):											
Remarks.												
												,

## **EXHIBIT 11**

# Lac Lawrann Conservancy - Proposed Trail Expansions

SE Quarter, Section 1, T11N-R19E City of West Bend, Washington County



Photo 1. Southwest view from top of esker.



Photo 2. Southwest view of trail (old railroad bed) just north of sample 12. Esker is to the right side of the trail.

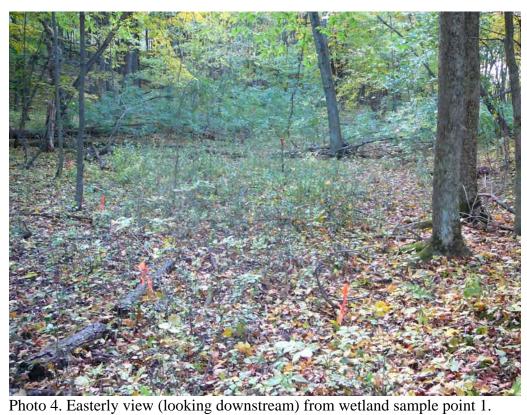
# **EXHIBIT 11 cont.**

**Lac Lawrann Conservancy - Proposed Trail Expansions** SE Quarter, Section 1, T11N-R19E

City of West Bend, Washington County



Photo 3. Westerly view (looking upstream) from wetland sample point 1.



## EXHIBIT 11 cont.

## **Lac Lawrann Conservancy - Proposed Trail Expansions**

SE Quarter, Section 1, T11N-R19E City of West Bend, Washington County



Photo 5. Wetland sample point 6 - fresh (wet) meadow with standing water. Wetland sample points 3 and 5 are similar.



Photo 6. Upland sample point 7. Upland sample points 4 and 8 are similar.

# EXHIBIT 11 cont. Lac Lawrann Conservancy - Proposed Trail Expansions SE Quarter, Section 1, T11N-R19E

City of West Bend, Washington County



Photo 7. Upland sample point 10 on small berm.