

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Wadena Sampling Date: 9/2/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: WA003a1W
 Investigator(s): RAJ/BEH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none) CL
 Slope (%): 0 - 2% Lat.: 46.799114 Long.: -94.916401 Datum: _____
 Soil Map Unit Name: 458E NWI Classification: _____
 Are climatic/hydrologic conditions of the site typical for this time of the year? (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present?
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The wetland is a floodplain forest community adjacent to the Shell River. As fluviially-deposited soils in a floodplain, the soils are naturally problematic. All parameters of wetland conditions are met.	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living <input type="checkbox"/> Drift Deposits (B3) Roots (C3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Recent Iron Reduction in Tilled <input type="checkbox"/> Inundation Visible on Aerial Soils (C6) Imagery (B7) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Sparsely Vegetated Concave <input type="checkbox"/> Other (Explain in Remarks) Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface water present? Yes <input type="checkbox"/> Depth (inches): _____ Water table present? Yes <input type="checkbox"/> Depth (inches): _____ Saturation present? Yes <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____ _____	
Remarks: Indicators of wetland hydrology are present.	

VEGETATION - Use scientific names of plants

Sampling Point:

WA003a1W

Tree Stratum			Plot Size (30 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Fraxinus pennsylvanica</i>		70	Y	FACW			
2	<i>Ulmus americana</i>		40	Y	FACW			
3	<i>Quercus macrocarpa</i>		40	Y	FACU			
4								
5								
6								
7								
8								
9								
10								
			150	= Total Cover				

Sapling/Shrub Stratum			Plot Size (15 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Quercus macrocarpa</i>		40	Y	FACU			
2								
3								
4								
5								
6								
7								
8								
9								
10								
			40	= Total Cover				

Herb Stratum			Plot Size (5 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Carex stricta</i>		30	Y	OBL			
2	<i>Phalaris arundinacea</i>		25	Y	FACW			
3	<i>Carex blanda</i>		15	N	FAC			
4	<i>Rubus pubescens</i>		5	N	FACW			
5	<i>Onclea sensibilis</i>		5	N	FACW			
6	<i>Iris versicolor</i>		5	N	OBL			
7	<i>Symphoricarpos lateriflorum</i>		3	N	FAC			
8	<i>Elymus virginicus</i>		3	N	FACW			
9	<i>Cornus alba</i>		1	N	FACW			
10								
11								
12								
13								
14								
15								
			92	= Total Cover				

Woody Vine Stratum			Plot Size (30 ft)			Absolute % Cover	Dominant Species	Indicator Status
1								
2								
3								
4								
5								
			0	= Total Cover				

50/20 Thresholds

	20%	50%
Tree Stratum	30	75
Sapling/Shrub Stratum	8	20
Herb Stratum	18	46
Woody Vine Stratum	0	0

Dominance Test Worksheet

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

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

Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>35</u>	x 1 =	<u>35</u>
FACW species	<u>149</u>	x 2 =	<u>298</u>
FAC species	<u>18</u>	x 3 =	<u>54</u>
FACU species	<u>80</u>	x 4 =	<u>320</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>282</u>	(A)	<u>707</u>
Prevalence Index = B/A =			<u>2.51</u>

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is ≤3.0*

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:

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

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 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? Y

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

A floodplain forest dominated by green ash and American elm with a lot of 3-5" DBH bur oak. Obligate species are present throughout the wetland area. The herbaceous community is dominated by wetland sedges and reed canary grass, with many additional species present at low coverage. Hydrophytic vegetation is present.

