

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Hubbard Sampling Date: 6/16/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: HUC5072_300d1W
 Investigator(s): BCS/BEH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CC
 Slope (%): 0 - 2% Lat.: 45.05783217 Long.: -95.14390617 Datum: _____
 Soil Map Unit Name: 820B 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 small, quaking aspen-dominated depression within a large, upland forest complex. The understory is relatively sparsely vegetated and is dominated by greater bladder sedge and sensitive fern.	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☒ Surface Water (A1) ☒ High Water Table (A2) ☒ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ Marl Deposits (B15) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☒ FAC-Neutral Test (D5)	
Field Observations: Surface water present? Yes ☒ Water table present? Yes ☒ Saturation present? Yes ☒ (includes capillary fringe)		Depth (inches): <u>3</u> Depth (inches): <u>0</u> Depth (inches): <u>0</u>	
		Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Surface water is present to a depth of 3 inches, and increases toward the wetland's center.			

VEGETATION - Use scientific names of plants
Sampling Point:

HUC5072_300d1W

Tree Stratum			Plot Size (30 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>		75	Y	FAC			
2	<i>Ulmus americana</i>		5	N	FACW			
3								
4								
5								
6								
7								
8								
9								
10								
			80	= Total Cover				

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

Herb Stratum			Plot Size (5 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Carex intumescens</i>		10	Y	FACW			
2	<i>Onoclea sensibilis</i>		10	Y	FACW			
3	<i>Calamagrostis canadensis</i>		5	N	OBL			
4	<i>Poa pratensis</i>		5	N	FACU			
5	<i>Carex gracillima</i>		2	N	FACU			
6	<i>Toxicodendron radicans</i>		2	N	FAC			
7								
8								
9								
10								
11								
12								
13								
14								
15								
			34	= 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	16	40
Sapling/Shrub Stratum	1	3
Herb Stratum	7	17
Woody Vine Stratum	0	0

Dominance Test Worksheet

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

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

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>5</u> x 1 =	<u>5</u>
FACW species	<u>30</u> x 2 =	<u>60</u>
FAC species	<u>77</u> x 3 =	<u>231</u>
FACU species	<u>7</u> x 4 =	<u>28</u>
UPL species	<u>0</u> x 5 =	<u>0</u>
Column totals	<u>119</u> (A)	<u>324</u> (B)
Prevalence Index = B/A =	<u>2.72</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)

Quaking aspen dominates the overstory, while the shrub stratum is dominated by scattered American elm saplings; the understory is sparsely vegetated, but greater bladder sedge predominates.

SOIL

Sampling Point: HUC5072 300d1W

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

[illegible]

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

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils:

- | | |
|--------------------------|--|
| ☐ | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ | Dark Surface (S7) (LRR K, L) |
| ☐ | Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ | Thin Dark Surface (S9) (LRR K, L) |
| ☐ | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ | Red Parent Material (F21) |
| ☐ | Very Shallow Dark Surface (TF12) |
| ☐ | Other (Explain in Remarks) |

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

Restrictive Layer (if observed):

Type:

Depth (inches): _____

Hydric soil present? Y

Remarks:

The soil is a dark silt loam underlain by a depleted silty clay loam with 3% prominent redox concentrations in the matrix, followed by additional depleted matrices with increasing redox concentrations. The soil meets indicator A11.