

**WETLAND DETERMINATION DATA FORM - North Central and Northeast Region**

Project/Site: SPP City/County: Wadena Sampling Date: 2016-07-25  
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: w-138n33w1-ab1  
 Investigator(s): DPT, MGH Section, Township, Range: S1, T138N, R33W  
 Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CL Slope (%): 0-2%  
 Subregion (LRR or MLRA): \_\_\_\_\_ Latitude: 46.7930825846... Longitude: -94.78908352... Datum: NAD83  
 Soil Map Unit Name: 564 NWI Classification: N/A  
 Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): No  
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes  
 Are Vegetation No, Soil No, or Hydrology No 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?	<u>Yes</u>	<b>Is the Sampled Area within a Wetland?</b>	
Hydric Soil Present?	<u>Yes</u>		<u>Yes</u>
Wetland Hydrology Present?	<u>Yes</u>		If yes, optional Wetland Site ID: <u>w-138n33w1-ab</u>
Remarks: (Explain alternative procedures here or in a separate report.) No digging, existing forest road, potential buried utilities. Precipitation above normal based on WETS analysis.			

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>	<u>Secondary Indicators (minimum of two required)</u>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
<u>yes</u> Surface Water (A1)	<u>      </u> Surface Soil Cracks (B6)
<u>      </u> Water-Stained Leaves (B9)	<u>      </u> Drainage Patterns (B10)
<u>yes</u> High Water Table (A2)	<u>      </u> Moss Trim Lines (B16)
<u>      </u> Aquatic Fauna (B13)	<u>      </u> Dry-Season Water Table (C2)
<u>yes</u> Saturation (A3)	<u>      </u> Crayfish Burrows (C8)
<u>      </u> Marl Deposits (B15)	<u>      </u> Saturation Visible on Aerial Imagery (C9)
<u>      </u> Water Marks (B1)	<u>      </u> Stunted/Stressed Plants (D1)
<u>      </u> Hydrogen Sulfide Odor (C1)	<u>      </u> <u>YES</u> Geomorphic Position (D2)
<u>      </u> Oxidized Rhizospheres on Living Roots (C3)	<u>      </u> Shallow Aquitard (D3)
<u>      </u> Presence of Reduced Iron (C4)	<u>      </u> Microtopographic Relief (D4)
<u>      </u> Recent Iron Reduction in Tilled Soils (C6)	<u>      </u> <u>YES</u> FAC-Neutral Test (D5)
<u>      </u> Thin Muck Surface (C7)	
<u>      </u> Other (Explain in Remarks)	
<u>      </u> Sparsely Vegetated Concave Surface (B8)	

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b>	<u>Yes</u>
Surface Water Present?	<u>Yes</u>	Depth (inches)	<u>6</u>
Water Table Present?	<u>Yes</u>	Depth (inches)	<u>0</u>
Saturation Present? (includes capillary fringe)	<u>Yes</u>	Depth (inches)	<u>0</u>

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

Remarks:

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

Sampling Point: w-138n33...

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot Size: <u>30</u> )					
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
0 _____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: <span style="float:right">Multiply by:</span> OBL species <u>70.00</u> x 1 <u>70</u> FACW species <u>25.00</u> x 2 <u>50</u> FACU species <u>0.00</u> x 3 <u>0</u> UPL species <u>0.00</u> x 4 <u>0</u> Column Totals <u>110</u> (A) <u>165</u> (B) Prevalence Index = B/A = <u>1.5</u>	
<b>Sapling/Shrub Stratum</b> (Plot Size: <u>15</u> )					
1. <u>Salix petiolaris</u>	<u>10.00</u>	<u>Yes</u>	<u>OBL</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
10 _____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation <u>yes</u> 2 - Dominance Test is > 50% <u>yes</u> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) _____ <small><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small>	
<b>Herb Stratum</b> (Plot Size: <u>5</u> )					
1. <u>Sparganium americanum</u>	<u>30.00</u>	<u>Yes</u>	<u>OBL</u>		
2. <u>Phalaris arundinacea</u>	<u>25.00</u>	<u>Yes</u>	<u>FACW</u>		
3. <u>Carex lacustris</u>	<u>20.00</u>	<u>Yes</u>	<u>OBL</u>		
4. <u>Solidago gigantea</u>	<u>15.00</u>	<u>No</u>	<u>FAC</u>		
5. <u>Scirpus cyperinus</u>	<u>10.00</u>	<u>No</u>	<u>OBL</u>		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
100 _____ = Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> - All herbaecous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> - All woody vines greater than 3.28 ft in height.	
<b>Woody Vine Stratum</b> (Plot Size: <u>30</u> )					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
0 _____ = Total Cover				<b>Hydrophytic Vegetation Present?</b> <u>Yes</u>	
<b>Remarks:</b> (include photo numbers here or on a separate sheet.)					



Site Photograph 1

Sampling Point: w-138n33w1-ab1



Latitude: 46.7930906312976

Cowardin Classification: PEM

Longitude: -94.7890739702571

Circular 39: 3

Direction: south

Eggers & Reed: Shallow Marsh

Remarks:



Latitude: 46.7930908408452

Cowardin Classification: PEM

Longitude: -94.7890770715613

Circular 39: 3

Direction: east

Eggers & Reed: Shallow Marsh

Remarks: