

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

Project/Site: SPP City/County: Aitkin Sampling Date: 2016-08-10  
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: u-51n26w31-ac1  
 Investigator(s): ZCW, MGH Section, Township, Range: S31, T51N, R26W  
 Landform (hillslope, terrace, etc.): Side Slope Local Relief (concave, convex, none): VV Slope (%): 3-7%  
 Subregion (LRR or MLRA): \_\_\_\_\_ Latitude: 46.856025815985 Longitude: -93.67921510... Datum: NAD83  
 Soil Map Unit Name: 504B 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>No</u>	<b>Is the Sampled Area</b>
Hydric Soil Present? <u>No</u>	<b>within a Wetland?</b> <u>No</u>
Wetland Hydrology Present? <u>No</u>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Climatic conditions are "wet" based on the results of a 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>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted/Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

<b>Field Observations:</b>	
Surface Water Present? <u>No</u> Depth (inches) _____	
Water Table Present? <u>No</u> Depth (inches) _____	
Saturation Present? <u>No</u> Depth (inches) _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> <u>No</u>

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

Remarks:

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

Sampling Point: u-51n26w...

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot Size: <u>30</u> )					
1. <u>Quercus rubra</u>	<u>35.00</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>16.6666666666...</u> (A/B)	
2. <u>Acer rubrum</u>	<u>15.00</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Betula papyrifera</u>	<u>15.00</u>	<u>Yes</u>	<u>FACU</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
<u>65</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: <span style="float:right">Multiply by:</span> OBL species <u>0.00</u> x 1 <u>0</u> FACW species <u>0.00</u> x 2 <u>0</u> FACU species <u>105.00</u> x 3 <u>420</u> UPL species <u>80.00</u> x 4 <u>400</u> Column Totals <u>225</u> (A) <u>940</u> (B) Prevalence Index = B/A = <u>4.1777777...</u>	
<b>Sapling/Shrub Stratum</b> (Plot Size: <u>15</u> )					
1. <u>Corylus cornuta</u>	<u>60.00</u>	<u>Yes</u>	<u>UPL</u>		
2. <u>Populus tremuloides</u>	<u>10.00</u>	<u>No</u>	<u>FAC</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>70</u> = Total Cover					
<b>Herb Stratum</b> (Plot Size: <u>5</u> )					
1. <u>Eurybia macrophylla</u>	<u>45.00</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> 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>	
2. <u>Carex woodii</u>	<u>20.00</u>	<u>Yes</u>	_____		
3. <u>Clintonia borealis</u>	<u>15.00</u>	<u>No</u>	<u>FAC</u>		
4. <u>Pteridium aquilinum</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
<u>90</u> = Total Cover					
<b>Woody Vine Stratum</b> (Plot Size: <u>30</u> )					
1. _____	_____	_____	_____	<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.	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
<u>0</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> <span style="float:right"><u>No</u></span>	
<b>Remarks:</b> (include photo numbers here or on a separate sheet.)					



Site Photograph 1

Sampling Point: u-51n26w31-ac1



Latitude: 46.8560590502311

Cowardin Classification: \_\_\_\_\_

Longitude: -93.6791891233005

Circular 39: \_\_\_\_\_

Direction: West

Eggers & Reed: \_\_\_\_\_

Remarks:

Upland

Site Photograph 2

Sampling Point: u-51n26w31-ac1



Latitude: 46.8560556555603

Cowardin Classification: \_\_\_\_\_

Longitude: -93.6791952420898

Circular 39: \_\_\_\_\_

Direction: North

Eggers & Reed: \_\_\_\_\_

Remarks:

Upland