

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: SPP City/County: Polk Sampling Date: 2015-07-07
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: PO127b1W_R
 Investigator(s): JRT/KRG Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CC Slope (%): 0-2
 Subregion (LRR or MLRA): _____ Latitude: 47.7397151571... Longitude: -95.93858904...
 Datum: Minnesota State Plane North, NAD 83 (2011) U.S. feet

Soil Map Unit Name: I38A NWI Classification: PEMcd

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): Yes
 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>	Is the Sampled Area within a Wetland?	
Hydric Soil Present?	<u>Yes</u>		<u>Yes</u>
Wetland Hydrology Present?	<u>Yes</u>		If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The wetland is an extension of a previously mapped area to the south; it enters into more extensive shrub cover, with some balsam poplar as well.			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot Size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Populus balsamifera</u>	<u>30.00</u>	<u>Yes</u>	<u>FACW</u>	Number of Dominant Species _____ That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species _____ Species Across All Strata: <u>3</u> (B) Percent of Dominant Species _____ That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>30</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u>30</u> Multiply by: OBL species <u>10.00</u> x 1 <u>10</u> FACW species <u>175.00</u> x 2 <u>350</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>185</u> (A) <u>360</u> (B) Prevalence Index = B/A = <u>1.9459459...</u>
Sapling/Shrub Stratum (Plot Size: <u>15 ft</u>)				
1. <u>Salix discolor</u>	<u>30.00</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Populus balsamifera</u>	<u>20.00</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Cornus alba</u>	<u>10.00</u>	<u>No</u>	<u>FACW</u>	
4. <u>Salix petiolaris</u>	<u>5.00</u>	<u>No</u>	<u>OBL</u>	
5. _____	_____	_____	_____	
<u>65</u> = Total Cover				
Herb Stratum (Plot Size: <u>5 ft</u>)				
1. <u>Phalaris arundinacea</u>	<u>80.00</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>yes</u> 1 - Rapid Test for Hydrophytic Vegetation <u>yes</u> 2 - Dominance Test is > 50% <u>yes</u> 3 - Prevalence Index is ≤ 3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) _____ ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Symphotrichum puniceum</u>	<u>5.00</u>	<u>No</u>	<u>OBL</u>	
3. <u>Equisetum pratense</u>	<u>5.00</u>	<u>No</u>	<u>FACW</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>90</u> = Total Cover				
Woody Vine Stratum (Plot Size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Hydrophytic Vegetation Present? _____				

Remarks:
 The wetland is dominated by a number of willows and balsam poplar and has heavy cover of reed canary grass in the ground layer.

SOIL

Sampling Point: PO127b1...

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 2 1	100					MMI	loamy mucky mineral
7-20	10YR 3 2	45					FS	
7-20	10YR 4 2	45					FS	
7-20	10YR 2 1	10					MMI	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16)(LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (explain in remarks)
<input type="checkbox"/> 2.5cm Mucky Peat or Peat (S2)(LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____

Remarks:

The soil is a loamy mucky mineral over a mixed sandy layer, which meets hydric indicator F1.

HYDROLOGY

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<u>yes</u> <input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)	
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<u>yes</u> <input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<u>yes</u> <input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)	

Field Observations:

Surface Water Present? <u>No</u>	Depth (inches) _____	Wetland Hydrology Present? <u>Yes</u>
Water Table Present? <u>No</u>	Depth (inches) _____	
Saturation Present? <u>Yes</u>	Depth (inches) <u>0</u>	

(includes capillary fringe)

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

Remarks:

The wetland is saturated at the surface.

Site Photograph 1

Sampling Point: PO127b1W_R

