

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: PO127b6W_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: 47.7398207691... Longitude: -95.92992450...
Datum: Minnesota State Plane North, NAD 83 (2011) U.S. feet
Soil Map Unit Name: I65A NWI Classification: PEMC

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? YesAre 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? <u>Yes</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	<u>Yes</u>	
Wetland Hydrology Present?	<u>Yes</u>	
Remarks: (Explain alternative procedures here or in a separate report.) The wetland is a dense Shrub-Carr dominated by slender-leaved willow.		

VEGETATION - Use scientific names of plants.

Tree Stratum	(Plot Size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		<u>0</u> = Total Cover		
Sapling/Shrub Stratum (Plot Size: <u>15 ft</u>)				
1.	<u>Salix petiolaris</u>	<u>50.00</u>	<u>Yes</u>	<u>OBL</u>
2.	<u>Cornus alba</u>	<u>20.00</u>	<u>Yes</u>	<u>FACW</u>
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		<u>70</u> = Total Cover		
Herb Stratum (Plot Size: <u>5 ft</u>)				
1.	<u>Phalaris arundinacea</u>	<u>20.00</u>	<u>Yes</u>	<u>FACW</u>
2.	<u>Solidago gigantea</u>	<u>5.00</u>	<u>Yes</u>	<u>FAC</u>
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____
		<u>25</u> = Total Cover		
Woody Vine Stratum (Plot Size: _____)				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
		<u>0</u> = Total Cover		
% Bare Ground in Herb Stratum <u>75</u>				

Dominance Test worksheet:
Number of Dominant Species _____
That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species _____
Species Across All Strata: 4 (B)
Percent of Dominant Species _____
That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:
Total % Cover of: _____ Multiply by: _____
OBL species 50.00 x 1 50
FACW species 40.00 x 2 80
FACU species 5.00 x 3 0
UPL species 0.00 x 4 0
Column Totals 95 (A) 145 (B)
Prevalence Index = B/A = 1.5263157...

Hydrophytic Vegetation Indicators:
_____ 1 - Rapid Test for Hydrophytic Vegetation
yes 2 - Dominance Test is > 50%
yes 3 - Prevalence Index is ≤ 3.0¹
_____ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation¹ _____
(Explain) _____
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? _____

Remarks:
The wetland is dominated by slender-leaved willow with sparse ground cover dominated by reed canary grass.

SOIL

Sampling Point: PO127b6...

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

Depth	Matrix	Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-10	10YR 2 1	100					MMI	loamy mucky mineral		
10-18	10YR 3 1	100					FS			

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

☐ Histosol (A1)

☐ Histic Epipedon (A2)

☐ Black Histic (A3)

☐ Hydrogen Sulfide (A4)

☐ Stratified Layers (A5)

☐ 1cm Muck (A9) (LRR F, G, H)

☐ Depleted Below Dark Surface (A11)

☐ Thick Dark Surface (A12)

☐ Sandy Mucky Mineral (S1)

☐ 2.5cm Mucky Peat or Peat (S2)(LRR G, H)

☐ 5cm Mucky Peat or Peat (S3) (LRR F)

☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)

☐ Stripped Matrix (S6)

☒ Loamy Mucky Mineral (F1) (LRR K, L)

☐ Loamy Gleyed Matrix (F2)

☐ Depleted Matrix (F3)

☐ Redox Dark Surface (F6)

☐ Depleted Dark Surface (F7)

☐ Redox Depressions (F8)

☐ High Plains Depressions (F16)

(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soil³:

☐ 1cm Muck (A9) (LRR I, J)

☐ Coast Prairie Redox (A16)(LRR K, L, R)

☐ Dark Surface (S7) (LRR G)

☐ High Plains Depressions (F16)

(LRR H outside of MLRA 72 & 73)

☐ Reduced Vertic (F18)

☐ Red Parent Material (F21)

☐ Very Shallow Dark Surface (TF12)

☐ Other (explain in remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

☐

Type:

Depth (inches):

Hydric Soil Present? Yes

Remarks:

The wetland has a thick mucky mineral layer which meets indicator F1.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Surface Water (A1)

yes High Water Table (A2)

yes Saturation (A3)

Water Marks (B1)

Sediment Deposits (B2)

Drift Deposits (B3)

Algal Mat or Crust (B4)

Iron Deposits (B5)

Water-Stained Leaves (B9)

Inundation Visible on Aerial Imagery (B7)

Salt Crust (B11)

Aquatic Invertebrates (B13)

Hydrogen Sulfide Odor (C1)

Dry-Season Water Table (C2)

Oxidized Rhizospheres on Living Roots (C3)

(where not tilled)

Presence of Reduced Iron (C4)

Thin Muck Surface (C7)

Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)

Sparsely Vegetated Concave Surface (B8)

Drainage Patterns (B10)

Oxidized Rhizospheres on Living Roots (C3)

(where tilled)

Crayfish Burrows (C8)

Saturation Visible on Aerial Imagery (C9)

yes Geomorphic Position (D2)

yes FAC-Neutral Test (D5)

Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?

No

Water Table Present?

Yes

Saturation Present?

Yes

(includes capillary fringe)

Depth (inches)

Depth (inches) 2

Depth (inches) 0

Wetland Hydrology Present? Yes

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

Remarks:

The wetland is saturated at the surface and has a water table at 2 inches.

Site Photograph 1

Sampling Point: PO127b6W_R