

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Carlton Sampling Date: 5/26/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: CR130d1W
 Investigator(s): BJC/DGL Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CC
 Slope (%): 3 - 7% Lat.: 46.610872 Long.: -92.398245 Datum: _____
 Soil Map Unit Name: 188 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 consists of a scrub-shrub community within an existing right-of-way corridor.	

HYDROLOGY

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

VEGETATION - Use scientific names of plants

Sampling Point:

CR130d1W

Tree Stratum	Plot Size (30 ft)	Absolute % Cover	Dominant Species	Indicator Status																	
1					50/20 Thresholds <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"></td> <td style="width:25%;">20%</td> <td style="width:25%;">50%</td> </tr> <tr> <td>Tree Stratum</td> <td style="text-align:center;">0</td> <td style="text-align:center;">0</td> </tr> <tr> <td>Sapling/Shrub Stratum</td> <td style="text-align:center;">14</td> <td style="text-align:center;">35</td> </tr> <tr> <td>Herb Stratum</td> <td style="text-align:center;">20</td> <td style="text-align:center;">50</td> </tr> <tr> <td>Woody Vine Stratum</td> <td style="text-align:center;">0</td> <td style="text-align:center;">0</td> </tr> </table>			20%	50%	Tree Stratum	0	0	Sapling/Shrub Stratum	14	35	Herb Stratum	20	50	Woody Vine Stratum	0	0
	20%	50%																			
Tree Stratum	0	0																			
Sapling/Shrub Stratum	14	35																			
Herb Stratum	20	50																			
Woody Vine Stratum	0	0																			
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10		0 = Total Cover			Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across all Strata: <u>5</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)																
Sapling/Shrub Stratum	Plot Size (15 ft)	Absolute % Cover	Dominant Species	Indicator Status																	
1	<i>Alnus incana</i>	30	Y	FACW																	
2	<i>Salix petiolaris</i>	20	Y	FACW																	
3	<i>Populus balsamifera</i>	20	Y	FACW																	
4																					
5																					
6																					
7																					
8																					
9																					
10		70 = Total Cover			Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>160</u> x 2 = <u>320</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>170</u> (A) <u>350</u> (B) Prevalence Index = B/A = <u>2.06</u>																
Herb Stratum	Plot Size (5 ft)	Absolute % Cover	Dominant Species	Indicator Status																	
1	<i>Phalaris arundinacea</i>	45	Y	FACW																	
2	<i>Onoclea sensibilis</i>	30	Y	FACW																	
3	<i>Ribes hirtellum</i>	15	N	FACW																	
4	<i>Rubus idaeus</i>	10	N	FAC																	
5																					
6																					
7																					
8																					
9																					
10					Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic																
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20		100 = Total Cover																			
Woody Vine Stratum	Plot Size (30 ft)	Absolute % Cover	Dominant Species	Indicator Status	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.																
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10		0 = Total Cover			Hydrophytic vegetation present? <u>Y</u>																

Remarks: (Include photo numbers here or on a separate sheet)
 The wetland is dominated by re-emerging hydrophytic vegetation, including reed canary grass and sensitive fern.

SOIL

Sampling Point: CR130d1W

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

Depth (In.)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		

*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)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- 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)

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:
 Soils could not be sampled due to the location within an existing pipeline corridor. Soils are assumed to be hydric due to the landscape position and dominance of hydrophytic vegetation.