WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP	Ci	ity/County: Aitkin		Sampli	ing Date: 2016-08-17
Applicant/Owner: Enbridge			State: Minnesota	Sampli	ng Point: <u>w-50n26w7-k1</u>
Investigator(s): ZCW, MGH		Section, Township	p, Range: <u>S7, T50N, R26</u>	5W	
Landform (hillslope, terrace, etc.): Depres	ssion		Local Relief (concave, o	convex, none): CC	Slope (%): 0-2%
Subregion (LRR or MLRA):		Latitude: 46	5.8402175466 Lo	ongitude: -93.68137168	Datum: NAD83
Soil Map Unit Name: 292				NWI Cla	assification: N/A
Are climatic/hydrologic conditions on the	site typic	al for this time of year	? (if no, explain in Rema	_	No
Are Vegetation No , Soil No , or Hyd		•		•	
Are Vegetation No , Soil No , or Hydro	ology <u>No</u>	 _ naturally problematio	c? (If needed, explain a	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach site	map show	wing sampling point lo	cations, transects, imp	ortant features, etc.	
Hydrophytic Vegetation Present?		Yes	Is the Sampled Area		
Hydric Soil Present?		<u>Yes</u>	within a Wetland?		Yes
Wetland Hydrology Present?		<u>Yes</u>	If yes, optional Wetlan	d Site ID:	<u>w-50n26w7-k</u>
Remarks: (Explain alternative procedure	s here or i	n a separate report.)	-		
Climatic conditions are "wet" based on t	he results:	of a WETS analysis.			
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)
	and and all	and all that and A			
Primary Indicators (minimum of one is re	<u>:quirea; cn</u>		(-0)		oil Cracks (B6)
yes Surface Water (A1)	_	Water-Stained Leave	s (B9)		Patterns (B10)
no High Water Table (A2)	_	Aquatic Fauna (B13)			Lines (B16)
Saturation (A3) Water Marks (P1)	_	Marl Deposits (B15)	(C1)		n Water Table (C2)
Water Marks (B1) Sodiment Denosits (B2)	_	Hydrogen Sulfide Odd		Crayfish Bu	
Sediment Deposits (B2)	_		es on Living Roots (C3)		Visible on Aerial Imagery (C9)
Drift Deposits (B3)	_	Presence of Reduced		yes Geomorph	ressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5)	_	Recent Iron Reductio		Shallow Aq	
Inundation Visible on Aerial Imagery (B7)	_	Thin Muck Surface (C Other (Explain in Ren			graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	_	Other (Explain in Nen	iidiksj	yes FAC-Neutra	
Field Observations:				100 menes	in rest (DD)
Surface Water Present?	Yes	Depth (inches)	3		
Water Table Present?	Yes	Depth (inches)			
Saturation Present?	Yes	Depth (inches)		Wetland Hydrology P	resent? Yes
(includes capillary fringe)		Depth (menes)	<u>-</u>	Wedalia Hydrology	<u></u>
Describe Recorded Data (stream gauge, r	monitoring	a wall parial photos no	rovious inspections) if a	availahla:	
Describe Necorded Data (Stream Badge, 1	HUHILUHA	ع سوان, محاناها بانانانان به به ا	revious inspections,, in c	avallabie.	
Remarks:					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 3 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 3 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 100 (A/B)
		_	_	
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	0	_ = Total Cover		OBL species <u>60.00</u> x 1 <u>60</u>
Sapling/Shrub Stratum (Plot Size: 15				FACW species <u>15.00</u> x 2 <u>30</u>
1		_	_	FACU species x 3
2			_	UPL species <u>0.00</u> x 4 <u>0</u>
3				Column Totals 75 (A) 90 (B)
4.				Prevalence Index = B/A = 1.2
5.				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7			_	yes 2 - Dominance Test is > 50%
	0	_ = Total Cover		yes 3 - Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot Size: 5)				4 - Morphological Adaptations 1 (Provide
1. Typha X glauca	35.00	Yes	OBL	supporting data in Remarks or on a separate sheet)
2. Scirpus cyperinus	25.00	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Poa palustris	15.00	Yes	FACW	1
4.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
		_	_	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast
7				height (DBH), regardless of height.
8				-
9		_	_	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than
10				or equal to 3.28 ft (1 m) tall.
11.				Herb - All herbaeceous (non-woody) plants, regardless of size, and
		_		woody plants less than 3.28 ft tall.
12	75			-
	75	_ = Total Cover		Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot Size: 30				
1		_	_	-
2				Hydrophytic
3.				Vegetation Present? Yes
4.				
	0	=Total Cover		7
Demander (include abote acceptant beauty)	-			
Remarks: (include photo numbers here or on a separate sheet	t.)			

Sampling Point: w-50n26w... **SOIL** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix **Redox Features** Depth Loc² (inches) Color (moist) Color (moist) % Type¹ Texture Remarks ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soil³: Hydric Soil Indicators: Polyvalue Below Surface (S8) (LRR R, MLRA Histosol (A1) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Coast Prairie Redox (A16)(LRR K, L, R) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Dark Surface (S7) (LRR K, M) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Maganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (explain in remarks) Dark Surface (S7) (LRR R, MLRA 149B) Restrictive Layer (if observed): Hydric Soil Present? Yes Depth (inches): Remarks: Sample point taken along existing forest road. No digging. Hydric soils assumed based on vegetation and hydrology.

Site Photograph 1 Sampling Point: w-50n26w7-k1



Latitude: 46.8401970947598	Cowardin Classification: PEM
Longitude: -93.6813447811582	Circular 39: 2
Direction: West	Eggers & Reed: Fresh (Wet) Meadow

Remarks:		

Site Photograph 2 Sampling Point: w-50n26w7-k1



Latitude: 46.8401973043073	Cowardin Classification: PEM
Longitude: -93.6813446135201	Circular 39: 2
Direction: West	Eggers & Reed: Fresh (Wet) Meadow
Remarks:	