WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site: Applicant:		L3R Enbridge								Date: 08/04/14 County: Marshall	
Investigators	5:	BCS/KRG/NTT		Subregion (MLRA or LRR): MLRA 56						State: MN	
Soil Unit:	I24A NWI Classification:										
Landform:	Dip Local Relief: LC									Sample Point: w-155n45w18-c1	
Slope (%):	0 - 2%	nditions on the sit	Latitude: 48.			-96.484		Datum:		- Constitution	
		onditions on the site			•	1			\Box No	Section:	
Are Vegetati		I □, or Hydrology I □, or Hydrology	•			AIG	e normal circun ☑ Yes		esent?	Township: Range: Dir:	
SUMMARY (i		E 103				
Hydrophytic			Yes	5				Hydric Soi	Is Present?	Yes	
Wetland Hyd	•		Yes	;						nt Within A Wetland? Yes	
Remarks:		d is a seasonally-fl wheat field.	looded basir	n dominated	l by toad rush	n, yellow t	foxtail seedling	s, and sloug	gh grass, loo	cated in a shallow drainage within a tilled,	
HYDROLOG	Y										
Primary	<u>.</u>	licators (Check all	l that apply;	Minimum o			econdary requi	red):	<u>Secondary:</u>		
	A1 - Surface A2 - High Wa				□ B11 - Salt	Crust atic Fauna				B6 - Surface Soil Cracks B8 - Sparsely Vegetated Concave Surface	
	A3 - Saturatio				C1 - Hydro	ogen Sulfid		B10 - Drainage Patterns			
	B1 - Water M					Season Wa		Deete (net till		C3 - Oxidized Rhizospheres on Living Roots (tilled	
	B2 - Sedimer B3 - Drift Dep	•					spheres on Living duced Iron	Roots (not till		C8 - Crayfish Burrows C9 - Saturation Visible on Aerial Imagery	
	B4 - Algal Ma	at or Crust			🗆 C7 - Thin	Muck Surfa			\checkmark	D2 - Geomorphic Position	
	B5 - Iron Dep		0000		□ Other (Ex	olain)				D5 - FAC-Neutral Test	
 B7 - Inundation Visible on Aerial Imagery B9 - Water-Stained Leaves 											
Field Observations:											
Surface Wat	er Present?	Yes 🛛	Dep	oth:	(in.)			Watland			
Water Table	Present?	Yes 🛛	Dep		(in.)			wetland F	lydrology l	Present? Y	
Saturation P	resent?	Yes 🛛	Dep	oth:	(in.)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Describe Rec	corded Data (stream gauge, mon	itoring well, a	erial photos	, previous ins	pections),	if available:				
Describe Rec Remarks:		stream gauge, mon surface soil crackir	-	-	-			a low-lying	area of the	e field.	
Remarks: SOILS	Algal mat, s	surface soil crackir	ng, and drair	nage patter	ns present. T	he site is	also located in	, ,	area of the	e field.	
Remarks: SOILS Profile Descr	Algal mat, s	surface soil crackin	ng, and drain	ument the	ns present. T	he site is onfirm th	also located in e absence of in	dicators.)	area of the	e field.	
Remarks: SOILS Profile Descr	Algal mat, s	surface soil crackir	ng, and drain	ument the	ns present. T	he site is onfirm th	also located in e absence of in	dicators.)	area of the	e field.	
Remarks: SOILS Profile Descr	Algal mat, s	surface soil crackin	ng, and drain	ument the	ns present. T	he site is onfirm th	e absence of in ore Lining, M=Matr	dicators.)	area of the	e field.	
Remarks: SOILS Profile Descr	Algal mat, s	ibe to the depth ne letion, RM=Reduced M	ng, and drain	cument the	ns present. T	he site is onfirm th ation: PL=P	e absence of in ore Lining, M=Matr	dicators.)	area of the	field. Remarks	
Remarks: SOILS Profile Descr (Type: C=Concer Depth (In.) 0-9	Algal mat, s iption (Descr ntration, D=Dep	ibe to the depth ne letion, RM=Reduced M Matrix Color (Moist) 2/2	eeded to doc atrix, CS=Cove	cument the pred/Coated S	indicator or c	he site is onfirm th ation: PL=P Mottle	e absence of in ore Lining, M=Matr	dicators.)	Texture LFS		
Remarks: SOILS Profile Descr (Type: C=Concer Depth (In.) 0-9 0-9	Algal mat, s iption (Descr ntration, D=Dep Hue_10YR Hue_10YR	ibe to the depth ne letion, RM=Reduced M Matrix Color (Moist) 2/2 2/1	eeded to doc atrix, CS=Cove	cument the bred/Coated S	indicator or c and Grains; Loca	he site is onfirm the ation: PL=P Mottle %	e absence of in ore Lining, M=Matr es Type	dicators.)	Texture LFS SC		
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Remarks: SOILS Profile Descr (Type: C=Concer Depth (In.) 0-9 0-9 0-9 9-17 NRCS Hydr	Algal mat, s iption (Descr ntration, D=Dep Hue_10YR Hue_10YR	ibe to the depth ne letion, RM=Reduced M Matrix Color (Moist) 2/2 2/1 4/2	eeded to doc atrix, CS=Cove	cument the red/Coated S Col 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	or (Moist)	he site is onfirm the ation: PL=P Mottle %	e absence of in ore Lining, M=Matr es Type	dicators.)	Texture LFS SC LFS	Remarks	
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	: L3R				Sample Point: w-155n45w18-c1			
		e non-native	species.)					
Tree Stratum	(Plot size: 30 ft. radius)	0/ Cover	Dominant	Ind Status	Dominance Test Worksheet			
1.	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	Ind.Status	Dominance rest worksheet			
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)			
3.								
4.					Total Number of Dominant Spacing Agrees All Strate: 3 (B)			
					Total Number of Dominant Species Across All Strata: <u>3</u> (B)			
5.					$ = \frac{1}{2} $			
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)			
7.					Prevalence Index Worksheet			
8.								
9.					Total % Cover of: <u>Multiply by:</u>			
10.	 Total Covar –	0			OBL spp. 40 X 1 = 40			
	Total Cover =	0			FACW spp. 11 $X 2 = 22$			
Combiner/Obmuh	Other (Distained AF ft and ine)				FAC spp. 15 $X 3 = 45$			
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. 15 $x 4 = 60$			
1.					UPL spp. 0 $x 5 = 0$			
2.	-							
3.					Total 81 (A) 167 (B)			
4.								
5.					Prevalence Index = B/A = 2.062			
6.								
7.					Hudronbutic Vegetation Indicators			
8.					Hydrophytic Vegetation Indicators:			
9.					Rapid Test for Hydrophytic Vegetation			
10.					X Dominance Test is > 50%			
	Total Cover =	0			X Prevalence Index is ≤ 3.0 *			
					Morphological Adaptations (Explain) *			
	(Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *			
1.	Juncus bufonius	25	Y	OBL				
2.	Setaria pumila	15	Y	FACU	* Indicators of hydric soil and wetland hydrology must be			
3.	Beckmannia syzigachne	15	Y	OBL	present, unless disturbed or problematic.			
4.	Equisetum arvense	10	N	FAC	Definitions of Vegetation Strata:			
5.	Juncus torreyi	5	N	FACW				
6	Plantago major	5	N	FAC	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast			
7.	Ranunculus pensylvanicus	2	Ν	FACW	height (DBH), regardless of height.			
8.	Bidens frondosa	2	Ν	FACW				
9.	Epilobium ciliatum	2	Ν	FACW	Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.			
10.								
11.								
12.					Herb - All herbaceous (non-woody) plants, regardless of size.			
13.								
14.								
15.					Woody Vines - All woody vines, regardless of height.			
	Total Cover =	81						
Woody Vine St	tratum (Plot size: 30 ft. radius)							
1.								
2.								
3.					Hydrophytic Vegetation Present? Y			
5.								
4.	-							
	Total Cover =	0						
Remarks:	The wetland sample area is dominated by toa		ellow foxta	il seedling	gs and slough grass, with a large component of other wetland forbs and graminoids			
interspersed throughout.								
Additional Remarks:								