APPENDIX F

WETLAND DELINEATION REPORT AND

MINNEHAHA CREEK WATER DISTRICT RESPONSE

WETLAND DELINEATION REPORT

Xcel Energy, Inc. Orono Substation Expansion Project

Orono, Minnesota

July 2, 2010

Prepared For:

Xcel Energy, Inc.
414 Nicollet Mall
Minneapolis, Minnesota 55401

Prepared By:

Westwood

MPUC Docket No.
E002/TL-11-223

Wetland Delineation Report

Orono Substation Expansion Project

Orono, Hennepin County, Minnesota

Prepared for:

Xcel Energy, Inc.
414 Nicollet Mall, MP 8
Minneapolis, Minnesota 55401-1993

Prepared by:

Westwood Professional Services, Inc.
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Project Number: 20101134.00

July 2, 2010

MPUC Docket No.
E002/TL-11-223

CONTENTS

List of Exhibits ii
List of Appendices ii

1.0 PURPOSE 1
2.0 SITE LOCATION AND DESCRIPTION 1
3.0 WETLAND DELINEATION METHODOLOGY 1
4.0 RESULTS 2
4.1 Mapping 2
4.2 Delineated Wetland Descriptions 3
4.3 Wetland Buffers 3
5.0 CONCLUSIONS 4
6.0 LITERATURE CITED 5
7.0 CERTIFICATION 6

EXHIBITS

Exhibit 1: Site Location and USGS
Exhibit 2: National Wetlands Inventory
Exhibit 3: Soils
Exhibit 4: Public Waters Inventory
Exhibit 5: Delineated Wetland Boundary Map

APPENDICES

Appendix A: Data Sheets
Appendix B: Wetland Classification Systems

1.0 PURPOSE

This delineation report, the attached exhibits, and data forms constitute the wetland delineation report for the existing Xcel Energy, Inc. Orono substation site located at 3960 Sixth Avenue North, Orono, Hennepin County, Minnesota 55356 (heretofore referred to as the Site). The wetland delineation was conducted to assist Xcel Energy, Inc. with planning expansion of the existing Orono substation facility. Minnehaha Creek Watershed District (MCWD) is the Local Governmental Unit (LGU) that administers the Minnesota Wetland Conservation Act (WCA). This delineation report provides the required documentation for wetland boundary determinations in conformance with the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory, Waterways Experiment Station, 1987) and the Interim Regional Supplement to the USACE Wetland Delineation Manual: Midwest Region (US Army Engineer Research and Development Center, 2008).

On behalf of Xcel Energy, Inc., Westwood respectfully requests that the MCWD, as the LGU, provide written confirmation that the delineated wetland boundary shown on the attached Delineated Wetland Boundary map (**Exhibit 5**) is acceptable for local administration of the WCA. Please consider this report a formal Wetland Boundary and Type Determination request pursuant to Minn. Rules 8420.0405. Westwood also requests that the USACE provide written confirmation that the delineated wetland boundary (**Exhibit 5**) is acceptable for Clean Water Act permitting purposes.

2.0 SITE LOCATION AND DESCRIPTION

The Site is located in the SW ¼ of the SW ¼ of Section 29 and the NW ¼ of the NW ¼ of Section 32, Township 118 North, Range 23 West, City of Orono, Hennepin County, Minnesota (**Exhibit 1**). The property is bounded by State Highway 12 (Wayzata Boulevard) and the Burlington Northern Santa Fe Railroad to the north, County Road 6 (6th Avenue North) to the south and east, with a residential property boundary to the west. The approximately 16-acre Site consists of an existing substation in the southwest corner of the property that is surrounded by open meadow with scattered trees. The remainder of the Site is comprised of wetland. Adjacent land use consists of large-lot, single-family homes to the west and south, wetland to the north, and a highway interchange to the east.

3.0 WETLAND DELINEATION METHODOLOGY

Prior to delineating wetland boundaries in the field, Westwood reviewed National Wetland Inventory (NWI) mapping (**Exhibit 2**), the Natural Resource Conservation Service (NRCS) Soil Survey Geographic database (SSURGO) for Hennepin County (2007) (**Exhibit 3**), the *Minnesota Department of Natural Resources* (MnDNR*) Public Waters and Wetlands Inventory* (PWI) for Hennepin County (**Exhibit 4**), and aerial photography for the site location.

On June 10, 2010, Westwood delineated the wetland using the level two routine determination method set forth in the USACE Wetlands Delineation Manual (Environmental Laboratory, Waterways Experiment Station, 1987) and the supplemental methods set forth in the Interim Regional Supplement to the USACE Wetland Delineation Manual: Midwest Region (US Army

Engineer Research and Development Center, 2008). Methods included establishment of sampling transects in a representative transition zone of the identified wetland. Each transect consisted of one sampling point in upland and one point in wetland. Soils, vegetation, and hydrology data were recorded on data forms and are included in **Appendix A** of this report. Species dominance for vegetation measurements was based on the percent coverage visually estimated within a 30-foot radius of the sample point location for the tree and vine layers, a 15-foot radius for the shrub layer, and a five-foot radius for the herbaceous layer.

Wetlands were classified according to Wetlands of the United States (U.S. Fish and Wildlife Service Circular 39; Shaw and Fredine; 1971) and Wetlands and Deepwater Habitats of the United States (FWS/OBS Publication 79/31; Cowardin et. al. 1979) (see the Classification Systems Table in **Appendix B**). Common names and scientific names for vegetation identified in this report and on the attached data forms generally correspond with the nomenclature used in the National List of Plant Species that Occur in Wetlands: North Central (Region 3) (USFWS, Reed, 1988).

Wetland boundaries were located using a Trimble GeoXT sub-meter accuracy global positioning unit (GPS). Wetland boundary points were then post processed using Trimble Pathfinder Office software to ensure sub-meter accurate GPS coordinates.

4.0 RESULTS

4.1 Mapping

NWI mapping (**Exhibit 2**) depicts one Type 3 (PEMCd) wetland on the northern and eastern portions of the Site and is consistent with the delineated wetland boundary.

The NRCS SSURGO for Hennepin County indicates that the soils listed below are mapped within the Site (**Exhibit 3**). Klossner soils (depressional), Hougton and Muskego soils (depressional), and Hamel-Glencoe (depressional) complex soils are listed as hydric in *Hydric Soils of Minnesota*, revised December 1995. All others are indicative of uplands. The distribution of hydric soils in NRCS mapping is consistent with the delineated wetland boundary.

Soil Map Unit Name	Hydric?
Klossner soils, depressional, 0 to 1% slopes (L49A)	Yes
Houghton and Muskego soils, depressional, 0 to 1% slopes (L50A)	Yes
Hamel-Glencoe, depressional, complex, 0 to 3% slopes (L132A)	Yes
Lerdal loam, 1 to 3% slopes (L35A)	No
Lester-Kilkenny complex, 6 to 12% slopes, eroded (L41C2)	No
Hamel overwash-Hamel complex, 1 to 4% slopes (L36A)	No
Angus-Kilkenny complex, 2 to 6% slopes (L40B)	No
Angus loam, morainic, 2 to 5% slopes (L37B)	No

The MnDNR PWI (**Exhibit 4**) for Hennepin County depicts the north part of Public Water Wetland (27-916W) covering most of the Site, with a second part off of the Site to the

south, south of County Road 6. The MnDNR PWI apparently overstates the area covered by wetland 27-916W within the Site as it is depicted in areas designated as upland during the field review. E-mail correspondence with MnDNR Area Hydrologist John Gleason on June 23, 2010 found that an Ordinary High Water Level (OHW) was established for wetland 27-916W in September, 1998. The OHW for the north part of 27-916W (within the Site) is 963.1 mean sea level (msl) and 963.9 msl for the south part.

4.2 Delineated Wetland Descriptions

Westwood completed a wetland delineation on the Site and identified one Type 3 (PEMCd) shallow marsh (Wetland A), approximately 13.5 acres of which lies within the property boundary (**Exhibit 5**). The wetland extends west of the subject property and is part of a larger wetland complex from which it was historically severed by Wayzata Boulevard and the Burlington Northern Santa Fe Railroad grade to the north and County Road 6 to the south. Two transects were completed along the southern wetland boundary.

Dominant wetland vegetation included reed canary grass, common reed grass and cattail with lesser amounts of box elder, spotted touch-me-not, stinging nettle, black willow, red-osier dogwood, quaking aspen, river-bank grape, Virginia creeper, and sedge. Upland vegetation was dominated by Canada goldenrod, Kentucky bluegrass, smooth brome, box elder, and prickly ash with lesser amounts of common buckthorn, tatarian honeysuckle, leafy spurge, smooth sumac, bird's-foot trefoil, Canada thistle, and scattered spruce and pine trees. Soils at the wetland sample point locations were generally 10YR 2/1with approximately 5% 10YR 4/4 concentrations. Soils met the A4 field indicator for hydric soils (Hydrogen Sulfide). Primary indicators of wetland hydrology included a high water table and saturation observed within 12 inches of the soil surface. Soils at upland sample locations were without redoximorphic features and no primary or secondary indicators of wetland hydrology were observed.

Detailed data collected for this wetland are provided on the attached data forms in **Appendix A**.

4.3 Wetland Buffers

According to current MCWD Rule D, wetlands greater than five acres in size require a 35-foot buffer. MCWD Rules for wetland protection are currently being revised. Assuming the proposed draft Wetland Protection Rule is adopted and implemented, the buffer width will be determined based on the functions and values of the wetland using the MCWD's Functional Assessment of Wetlands (MCRAM) or the Minnesota Routine Assessment Methodology (MnRAM). According to Becky Houdek with MCWD, Wetland A was classified as a Manage 2 wetland in 2001 using the MCRAM. As a Manage 2 wetland, base buffer widths would be 30-feet with a minimum applied buffer width of 24-feet should a permit application be submitted after the Wetland Protection Rule is implemented.

5.0 CONCLUSIONS

Westwood delineated and flagged one Type 3 (PEMCd) wetland within the Site totaling approximately 13.5 acres. The delineated wetland corresponded to an NWI-mapped PEMCd wetland and areas of mapped hydric soil (Klossner, Houghton and Muskego, and Hamel-Glencoe).

The PWI mapping of DNR Public Waters Wetland 27-916W indicated Wetland 27-916W extending into areas that were determined to be upland as a result of the field delineation. Westwood recommends that the MnDNR be requested to verify that the OHW of 27-916W does not extend beyond the delineated boundary. This can be done as part of the Technical Evaluation Panel (TEP) review of the delineation.

Westwood requests that MCWD, as the LGU, provide written confirmation to Xcel Energy, Inc. that the delineated wetland boundaries shown on the attached Wetland Boundaries map (**Exhibit 5**) are acceptable for local administration of the WCA and MCWD Rules. A completed WCA Application for Approval of Wetland Type and Boundary form accompanies this request to facilitate the WCA wetland boundary and type determination request.

Westwood also requests that the USACE provide a preliminary jurisdictional determination (JD) and formal wetland boundary determination for Wetland A. A completed Request for Corps of Engineers Wetland Delineation Review form accompanies this request to facilitate the wetland boundary and preliminary jurisdiction determination request.

6.0 LITERATURE CITED

Cowardin, L.M. , V.M. Carter , F.C. Golet , and E.T. LaRoe . 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Biological Services Program, Washington, DC, USA. FWS/OBS-79/31. 103pp.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

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Shaw, S.P. and C.G. Fredine. 1971. Wetlands of the United States. U.S. Fish and Wildlife Circular 39. U.S. Department of the Interior, Washington, D.C. 67 pp.

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U. S. Army Corps of Engineers. 2008. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-27. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers. 2009. 1996 National List of Vascular Plant Species that Occur in Wetlands. http://www.usace.army.mil/CECW/Documents/cecwo/reg/plants/l96_intro.pdf

U.S. Department of Agriculture, Natural Resources Conservation Service. 1996. Field Indicators of Hydric Soils in the United States. G.W. Hurt, Whited, P.M., and Pringle, R.F. (eds.). USDA, NRCS, Fort. Worth, TX.

7.0 CERTIFICATION

I certify that, to the best of my knowledge and belief, the wetland delineation completed for this Site is consistent with current wetland delineation practices and guidelines. I have the specific qualifications, education, training, and experience to complete wetland delineations and determinations in accordance with federal and state requirements.

Sincerely,

WESTWOOD PROFESSIONAL SERVICES

Kelly S. Kunst, WDC, PWS
Environmental Scientist
MN Certified Wetland Delineator 1114

Exhibits

Xcel Energy, Inc. Orono Substation Expansion Project

Orono, Hennepin County, Minnesota

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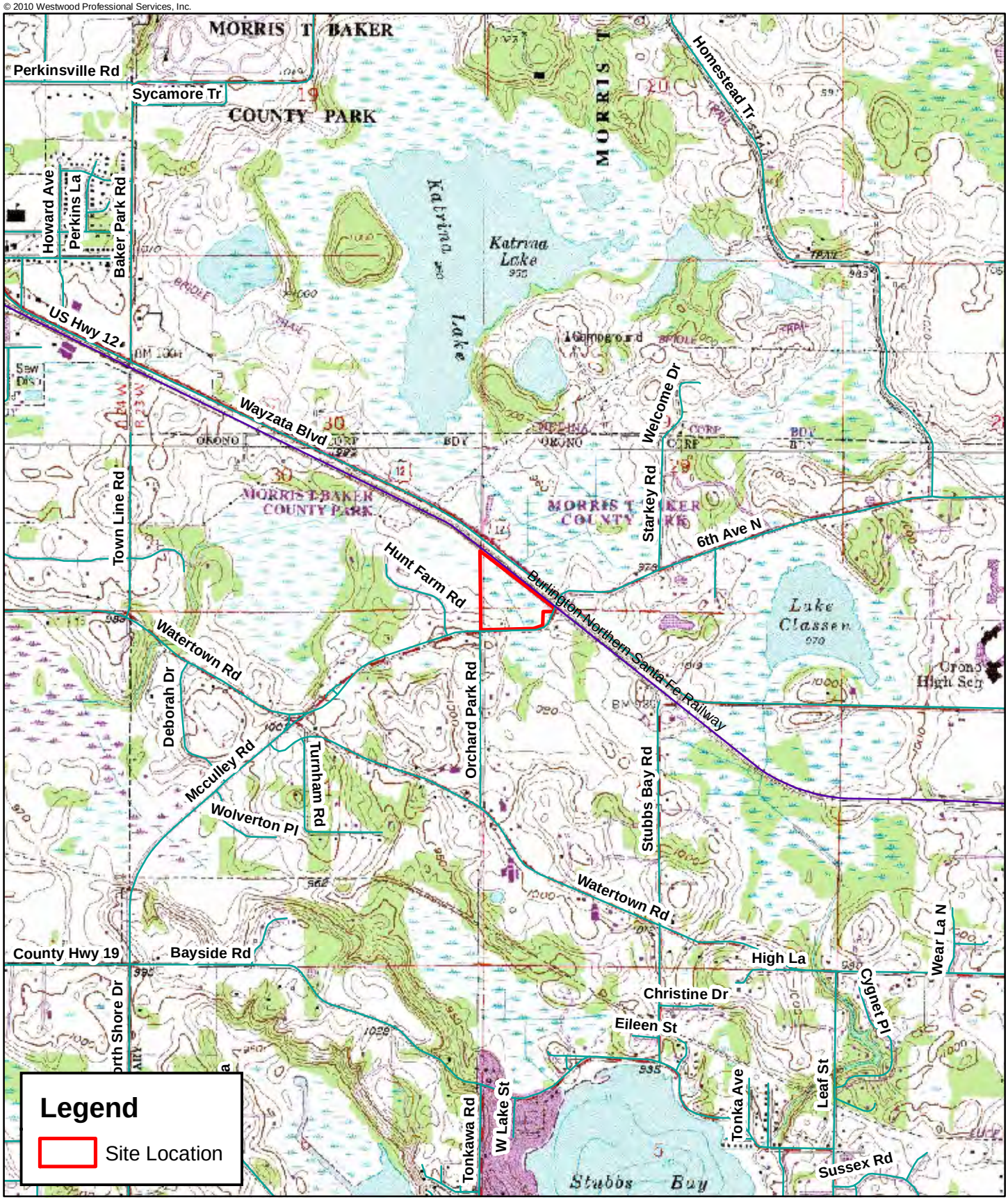

Data Source(s): USGS DRG Mosaic, 24K 2002, MnDOT BaseMap-Roads (2004), Westwood 2010.

Orono Substation Expansion

Orono, Minnesota

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N

0 2,000 Feet

Scale Bar

Site Location/USGS Topography

MPUC Docket No.
E002/TL-11-223

EXHIBIT 1

Wednesday, June 16, 2010 9:39:16 AM
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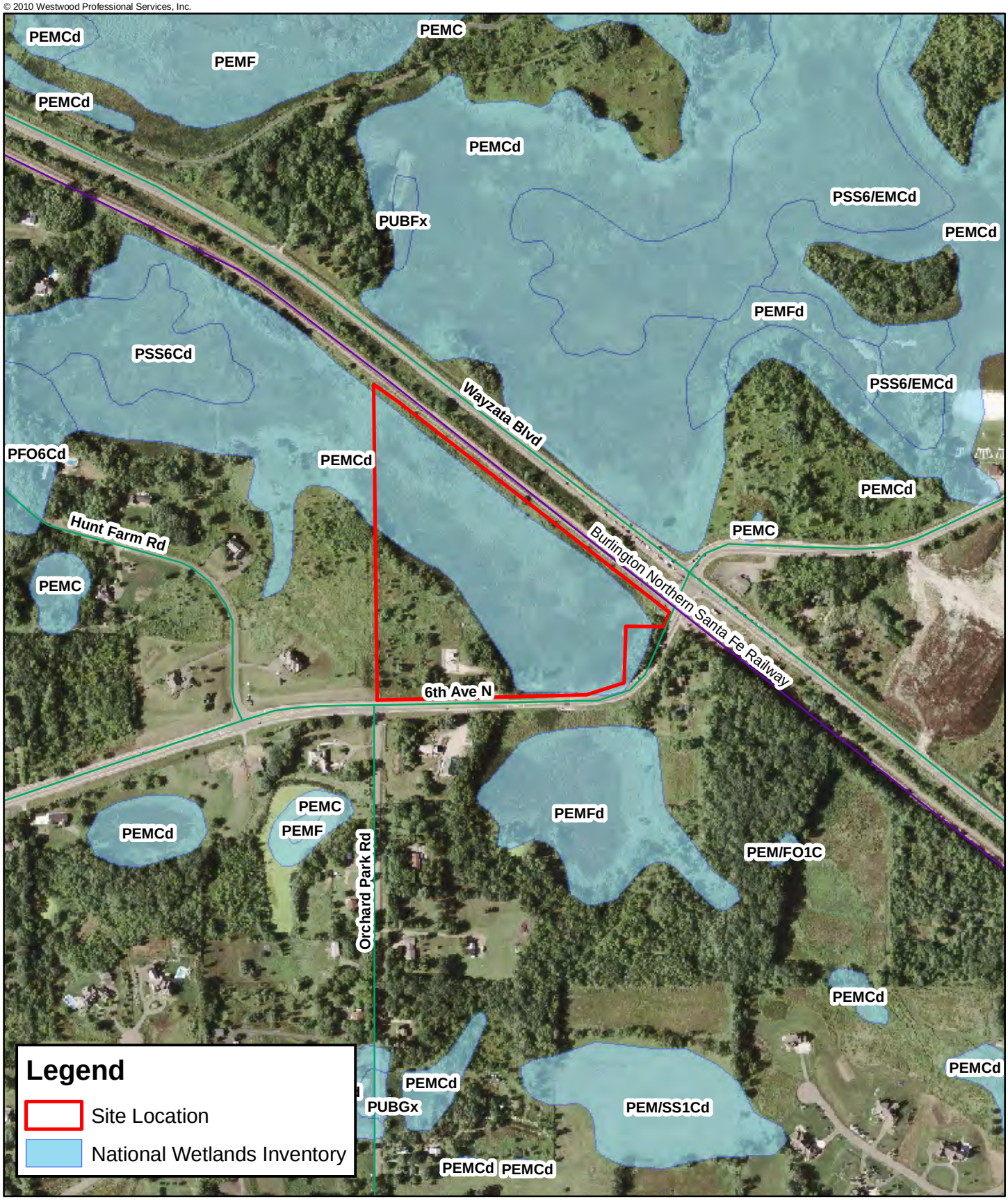

Data Source(s): USFWS NWI (1989), Westwood 2010.

Orono Substation Expansion

Orono, Minnesota

National Wetlands Inventory

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Westwood

N

0 500 Feet

Scale Bar

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EXHIBIT 2

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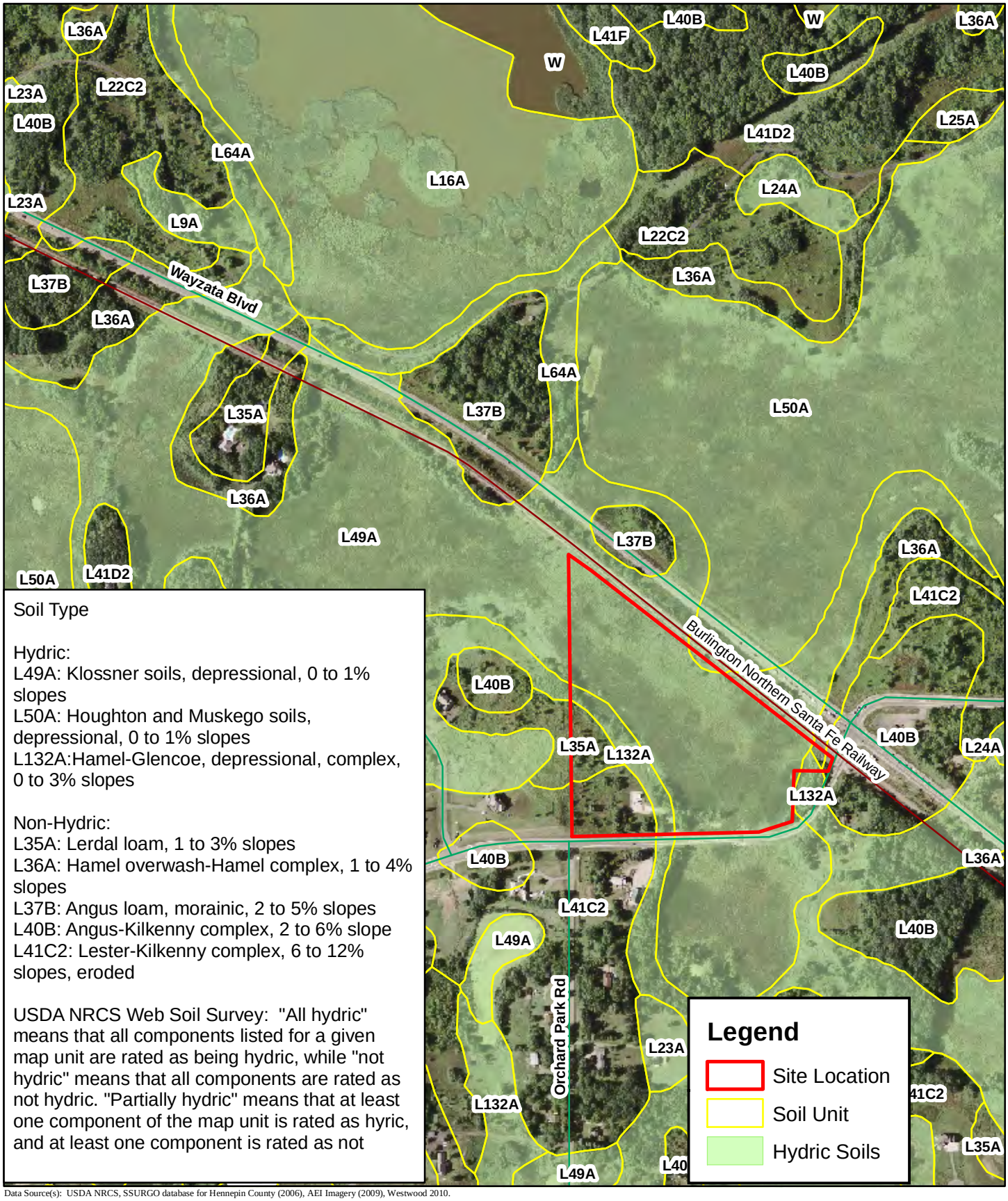

Soil Type

Hydric:
L49A: Klossner soils, depressional, 0 to 1% slopes
L50A: Houghton and Muskego soils, depressional, 0 to 1% slopes
L132A:Hamel-Glencoe, depressional, complex, 0 to 3% slopes

Non-Hydric:
L35A: Lerdal loam, 1 to 3% slopes
L36A: Hamel overwash-Hamel complex, 1 to 4% slopes
L37B: Angus loam, morainic, 2 to 5% slopes
L40B: Angus-Kilkenny complex, 2 to 6% slope
L41C2: Lester-Kilkenny complex, 6 to 12% slopes, eroded

USDA NRCS Web Soil Survey: "All hydric" means that all components listed for a given map unit are rated as being hydric, while "not hydric" means that all components are rated as not hydric. "Partially hydric" means that at least one component of the map unit is rated as hyric, and at least one component is rated as not

Data Source(s): USDA NRCS, SSURGO database for Hennepin County (2006), AEI Imagery (2009), Westwood 2010.

Orono Substation Expansion

Orono, Minnesota

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N

0 400 Feet

NRCS Digital Soil Survey

MPUC Docket No.
E002/TL-11-223

EXHIBIT 3

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Data Source(s):

Orono Substation Expansion

Orono, Minnesota

MnDNR Public Waters & Wetlands

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N

0 500 Feet

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EXHIBIT 4

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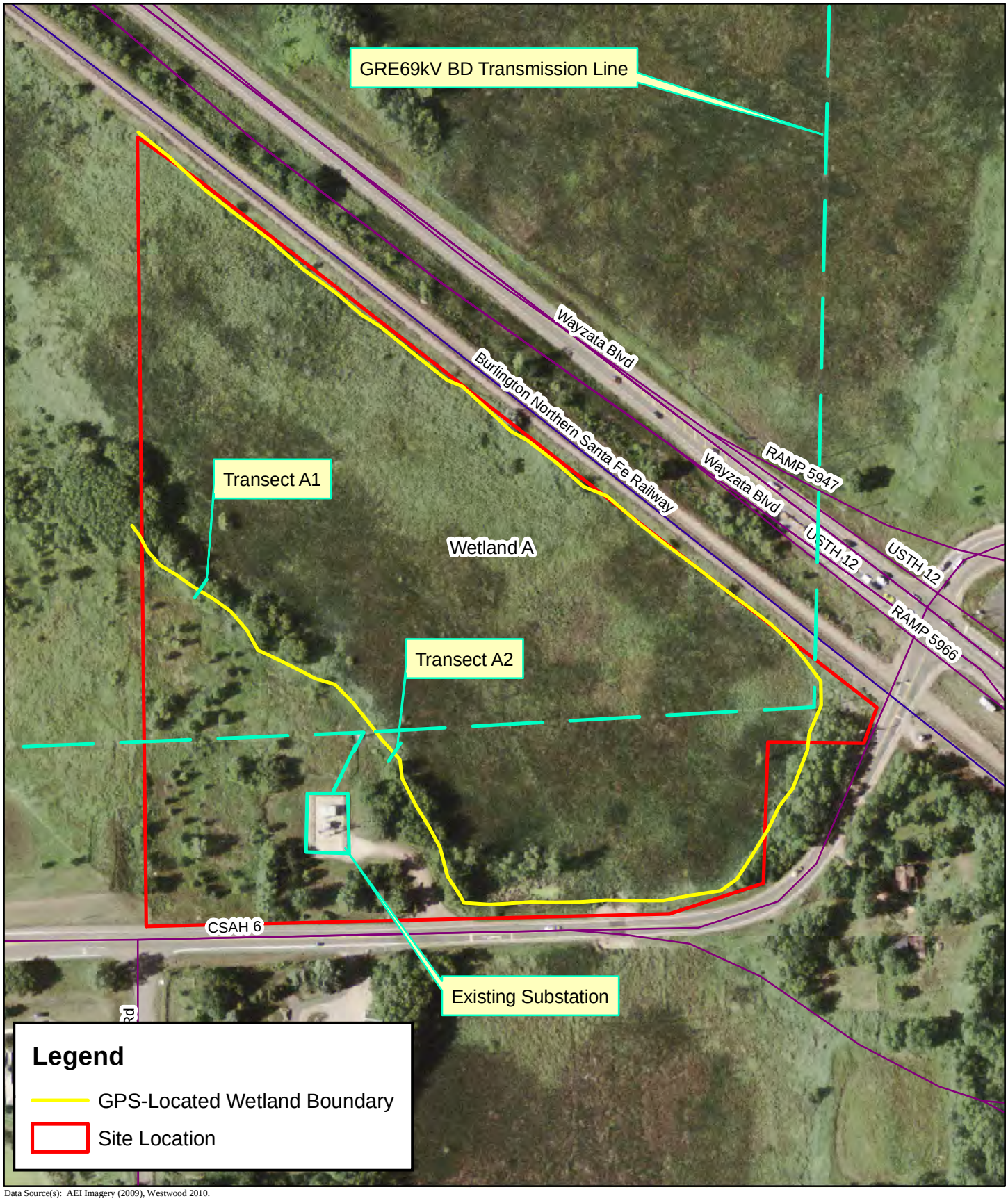

Data Source(s): AEI Imagery (2009), Westwood 2010.

Orono Substation Expansion

Orono, Minnesota

Delineated Wetland Boundary

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Eden Prairie, MN 55344

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FAX 952-937-5822
TOLL FREE 1-888-937-5150

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N

0 200 Feet

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E002/TL-11-223

EXHIBIT 5

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Appendix A

Wetland Delineation Data Forms

Xcel Energy Orono Substation Expansion Project

Hennepin County, Minnesota

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Orono Substation City/County: Hennepin Sampling Date: 6/10/2010

Applicant/Owner: Xcel Energy State: MN Sampling Point: A1 Wet

Investigator(s): Kelly D. Kunst Section, Township, Range: S. 29 & 32, T118, R. 23W

Landform (hillslope, terrace, etc.): none Local relief (concave, convex, none): none

Slope (%): 0 Lat: Long: Datum:

Soil Map Unit Name: Hamel-Glencoe (depressional) NWI or WWI classification: PEMCd

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ___ No ___

Are Vegetation ___, Soil ___, or Hydrology ___ 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?	Yes X	No ___	**Is the Sampled Area within a Wetland?** Yes X No ___
Hydric Soil Present?	Yes X	No ___	
Wetland Hydrology Present?	Yes X	No ___	

Remarks:

Wetland is partially drained, apparently due to catchment area changes.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	60	Y	FACW
2.			
3.			
4.			
5.			
	60 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	95	Y	FACW
2. *Bromus inermis*	5	N	UPL
3. *Erigeron annuus*	2	N	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	102 = Total Cover		

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	155	x 2 =	310
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	5	x 5 =	25
Column Totals:	162 (A)		341 (B)

Prevalence Index = B/A = 2.10

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

MPUC Docket No.
E002/TL-11-223

SOIL

Sampling Point: A1 Wet

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes X No ___ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 8

Wetland Hydrology Present? Yes X No ___

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

Remarks:

MPUC Docket No.
E002/TL-11-223

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Orono Substation City/County: Hennepin Sampling Date: 6/10/2010

Applicant/Owner: Xcel Energy State: MN Sampling Point: A1 Up

Investigator(s): Kelly D. Kunst Section, Township, Range: S. 29 & 32, T118, R. 23W

Landform (hillslope, terrace, etc.): none Local relief (concave, convex, none): none

Slope (%): ~2% Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Lerdal loam/Hamel-Glencoe (depressional) NWI or WWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ 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?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	15	Y	FACW
2.			
3.			
4.			
5.			
	15 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Xanthoxylum americanum*	10	Y	UPL
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Bromus inermis*	70	Y	UPL
2. *Poa pratensis*	25	Y	FAC
3. *Solidago canadensis*	2	N	FACU
4. *Cirsium arvensis*	2	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	99 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	25	x 3 =	75
FACU species	4	x 4 =	16
UPL species	80	x 5 =	400
Column Totals:	124 (A)		521 (B)

Prevalence Index = B/A = 4.20

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

MPUC Docket No. E002/TL-11-223

SOIL

Sampling Point: A1 Up

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					CL	
20-26	10YR 2/1	95	10YR 3/3	5	C	M	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

MPUC Docket No.
E002/TL-11-223

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Orono Substation City/County: Hennepin Sampling Date: 6/10/2010

Applicant/Owner: Xcel Energy State: MN Sampling Point: A2 Wet

Investigator(s): Kelly D. Kunst Section, Township, Range: S. 29 & 32, T118, R. 23W

Landform (hillslope, terrace, etc.): none Local relief (concave, convex, none): none

Slope (%): 0% Lat: Long: Datum:

Soil Map Unit Name: Hamel-Glencoe (depressional) NWI or WWI classification: PEMCd

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

Wetland is partially drained, apparently due to catchment area changes.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	15	Y	FACW
2.			
3.			
4.			
5.			
	15 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			UPL
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	100	Y	FACW
2. *Urtica dioica*	5	N	FAC
3. *Typha angustifolia*	2	N	OBL
4.			FACU
5.			
6.			
7.			
8.			
9.			
10.			
	107 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species	115	x 2 =	230
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	122 (A)		247 (B)

Prevalence Index = B/A = 2.02

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

MPUC Docket No. E002/TL-11-223

SOIL

Sampling Point: A2 Wet

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					CL	
18-24	N2.5/	100					C	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 12

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 8

Wetland Hydrology Present? Yes X No ___

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

Remarks:

MPUC Docket No.
E002/TL-11-223

Reset Form | Print Form

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Orono Substation City/County: Hennepin Sampling Date: 6/10/2010

Applicant/Owner: Xcel Energy State: MN Sampling Point: A2 Up

Investigator(s): Kelly D. Kunst Section, Township, Range: S. 29 & 32, T118, R. 23W

Landform (hillslope, terrace, etc.): none Local relief (concave, convex, none): slope

Slope (%): 10% Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Lerdal loam/Hamel-Glencoe (depressional) NWI or WWI classification: PEMCd

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ 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?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	25	Y	FACW
2.			
3.			
4.			
5.			
	25 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Xanthoxylum americanum*	5	Y	UPL
2.			
3.			
4.			
5.			
	5 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Solidago canadensis*	60	Y	FACU
2. *Poa pratensis*	40	Y	FAC
3. *Euphorbia esula*	20	N	UPL
4. *Cirsium arvensis*	2	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	122 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	40	x 3 =	120
FACU species	62	x 4 =	248
UPL species	25	x 5 =	125
Column Totals:	152 (A)		543 (B)

Prevalence Index = B/A = 3.57

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: A2 Up

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					CL	
18-24	10YR 2/1	95	10YR 4/4	5	C	M	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Appendix B

Wetland Classification System

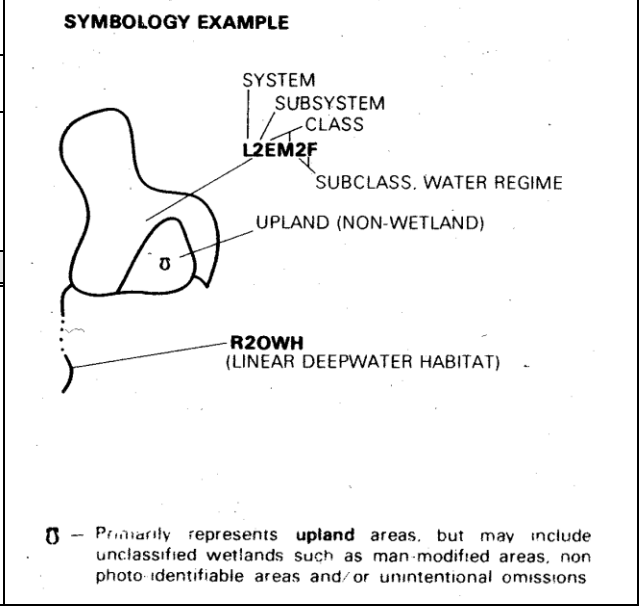
Cowardin Wetland Classification System

Source: Wetlands and Deepwater Habitats of the United States (FWS/OBS Publication 79/31; Cowardin et. al. 1979).

System	Symbol	Subsystems	System Specific Classes
Lacustrine	L	(1) Limnetic (2) Littoral	RB, UB, AB, OW, RS, US, EM,
Palustrine	**P**	None	RB, UB, AB, US, ML, EM, SS, FO, OW
Riverine	**R**	(1) Tidal Lower (2) Lower Perennial (3) Upper Perennial (4) Intermittent (5) Unknown Perennial	RB, UB, SB, AB, RS, US, EM, OW

Classes		Special Modifiers	Water Regimes
Rock Bottom	RB	**b** – beaver **d** – Partially drained/ditched **f** – Farmed **h** – diked/impounded **r** – artificial substrate **s** – spoil **x** – excavated	**A** – Temporarily flooded **B** – Saturated **C** – Seasonally flooded **D** – Seasonally flooded/well drained **E** – Seasonally saturated **F** – Semi-permanently flooded **G** – Intermittently exposed **H** – Permanently flooded **J** – Intermittently flooded **K** – Artificially flooded
Unconsolidated Bottom	**UB**		
Streambed	**SB**		
Aquatic Bed	**AB**		
Rocky Shore	**RS**		
Unconsolidated Shore	**US**		
Emergent	**EM**		
Open Water	**OW**		
Moss Lichen	**ML**		
Scrub Shrub	**SS**		
Forested	**FO**		

Symbology Sample



Circular 39 Wetland Classification System

Source: Wetlands of the United States (U.S. Fish and Wildlife Service Circular 39; Shaw and Fredine, 1971)

Type and Definition	Approximate Cowardin Equivalents
Type 1: Seasonally flooded basin	PEMA, PFOA, PUS
Type 2: Wet meadow	PEMB
Type 3: Shallow marsh	PEMC, PEMF, PSSH, PUBA, PUBC
Type 4: Deep marsh	L2ABF, L2EMF, L2EMG, L2US, PABF, PABG, PEMG, PEMH, PUBB, PUBF
Type 5: Shallow open water	L1, L2ABG, L2ABH, L2EMA, L2EMB, L2EMH, L2RS, L2UB, PABH, PUBG, PUBH
Type 6: Shrub swamp	PSSA, PSSC, PSSF, PSSG, PSS1, PSS5, PSS6B
Type 7: Wooded swamp	PF01, PFO5, PFO6B, PFOC, PFOF
Type 8: Bog	PFO2, PFO4, PFO7B, PSS2, PSS3, PSS4, PSS7B

Figure 1: Wetland Classification Systems

MPUC Docket No.
E002/TL-11-223

W10-08

Minnesota Wetland Conservation Act
Notice of Application

Local Government Unit (LGU)	Address
Minnehaha Creek Watershed District	**18202 Minnetonka Blvd, Deephaven, MN 55391**

1. PROJECT INFORMATION

Applicant Name	Project Name	Date of Application	Application Number
Xcel Energy, Inc.	**Xcel Energy Orono Substation Expansion**	**8/4/10**	**W10-08**

Type of Application (check all that apply):

☒ Wetland Boundary or Type ☐ No-Loss ☐ Exemption ☐ Sequencing

☐ Replacement Plan ☐ Banking Plan

Summary and description of proposed project (attach additional sheets as necessary):

Xcel Energy has applied for approval of a wetland boundary at the parcel located at 3960 Sixth Avenue North in the City of Orono (PID #29-118-23-33-0009). The delineation was performed by Westwood Professional Services on June 10, 2010. The delineation report is attached. The boundary will be reviewed in the field by MCWD staff.

2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person	Comments must be received by (minimum 15 business-day comment period):
Catherine Bach **District Technician**	**September 1, 2010**
Address (if different than LGU) **18202 Minnetonka Blvd** **Deephaven, MN 55391**	Date, time, and location of decision: **A decision will be made following field review of the delineation and completion of the comment period.**
Phone Number and E-mail Address **952-471-0590 ext. 226** **cbach@minnehahacreek.org**	Decision-maker for this application: ☒ Staff ☐ Governing Board or Council

Signature: Catherine Bach **Date:** 8/10/10

3. LIST OF ADDRESSEES

- ☒ SWCD TEP member: Stacey Lijewski - stacey.lijewski@co.hennepin.mn.us
- ☒ BWSR TEP member: Lynda Peterson - lynda.peterson@state.mn.us
- ☐ LGU TEP member (if different than LGU Contact):
- ☐ DNR TEP member:
- ☒ DNR Regional Office: Melissa Doperalski - melissa.doperalski@dnr.state.mn.us
- ☐ WD or WMO (if applicable):
- ☒ Applicant (notice only) and Landowner (if different): Xcel Energy, Joe Sedarski (Xcel Energy) - joseph.g.sedarski@xcelenergy.com
- ☒ Consultant: Westwood Professional Services, Kelly Kunst - kelly.kunst@westwoodps.com
- ☒ City: City of Orono, Christine Mattson - cmattson@ci.orono.mn.us
- ☐ Members of the public who requested notice (notice only):
- ☒ Corps of Engineers Project Manager (notice only): Melissa Jenny - melissa.m.jenny@usace.army.mil
- ☐ BWSR Wetland Bank Coordinator (wetland bank plan applications only):

4. MAILING INFORMATION

➢For a list of BWSR TEP representatives, see: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf

➢For a list of DNR TEP representatives, see: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf

➢Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.
Div. Ecol. Resources	Div. Ecol. Resources	Div. Ecol. Resources	Div. Ecol. Resources
2115 Birchmont Beach Rd. NE	1201 E. Hwy. 2	1200 Warner Road	261 Hwy. 15 South
Bemidji, MN 56601	Grand Rapids, MN 55744	St. Paul, MN 55106	New Ulm, MN 56073

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

➢For a list of Corps of Project Managers, see: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687
or send to: Dept. of the Army, Corps of Engineers, St. Paul District
ATTN: CO-R, 190 Fifth Street East
St. Paul, MN 55101-1638

➢For Wetland Bank Plan applications, also send a copy of the application to:
Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

5. ATTACHMENTS

In addition to the application, list any other attachments:

- ☐
- ☐
- ☐
- ☐
- ☐

Minnesota Wetland Conservation Act
Notice of Decision

Local Government Unit (LGU)	Address
Minnehaha Creek Watershed District	**18202 Minnetonka Blvd** **Deephaven, MN 55391**

1. PROJECT INFORMATION

Applicant Name	Project Name	Date of Application	Application Number
Xcel Energy, Inc.	**Xcel Energy Orono Substation Expansion**	**8/4/10**	**W10-08**

☐ Attach site locator map.

Type of Decision:

☒ Wetland Boundary or Type ☐ No-Loss ☐ Exemption ☐ Sequencing
☐ Replacement Plan ☐ Banking Plan

Technical Evaluation Panel Findings and Recommendation (if any):

☐ Approve ☐ Approve with conditions ☐ Deny

Summary (or attach):

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: **9/14/10**

☒ Approved ☐ Approved with conditions (include below) ☐ Denied

LGU Findings and Conclusions (attach additional sheets as necessary):

The wetland boundary delineated by Westwood Professional Services at 3960 Sixth Avenue North in the city of Orono (PID# 29-118-23-33-0009) on June 10, 2010 was reviewed in the field on August 20, 2010 by Minnehaha Creek Watershed District staff. The wetland area was identified as a type 3 PEMCd (shallow marsh) wetland. The dominant vegetation within the wetland consisted of cattail and reed canary grass, with lesser amounts of box elder. The boundary with upland was characterized by a slight change in elevation & a transition to primarily non-hydrophytic vegetation.

The boundary as flagged in the field and labeled in the delineation report submitted on August 4, 2010 is accepted by the MCWD. This decision is valid for 3 years. A project on this property may require a permit from the MCWD. If you have any questions, please contact me at 952-471-0590.

For Replacement Plans using credits from the State Wetland Bank:

Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)

Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

☐ **Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).

☐ **Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR "Declaration of Restrictions and Covenants" and "Consent to Replacement Wetland" forms have been filed with the county recorder's office in which the replacement wetland is located.

☐ **Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met!

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name **Catherine Bach**	Title **District Technician**	
Signature Catherine Bach	Date **9/14/10**	Phone Number and E-mail **952-471-0590 x 226** **cbach@minnehahacreek.org**

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

☒ Appeal of an LGU staff decision. Send petition and $_____ fee (if applicable) to: **Minnehaha Creek Watershed District** **18202 Minnetonka Blvd** **Deephaven, MN 55391**	☐ Appeal of LGU governing body decision. Send petition and $500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155

4. LIST OF ADDRESSEES

- ☒ SWCD TEP member: **Stacey Lijewski - stacey.lijewski@co.hennepin.mn.us**
- ☒ BWSR TEP member: **Lynda Peterson - lynda.peterson@state.mn.us**
- ☐ LGU TEP member (if different than LGU Contact):
- ☒ DNR TEP member: **Jack Gleason - john.gleason@dnr.state.mn.us**
- ☒ DNR Regional Office (if different than DNR TEP member) Melissa Doperalski - melissa.doperalski@dnr.state.mn.us
- ☐ WD or WMO (if applicable):
- ☒ Applicant and Landowner (if different) Xcel Energy, Joe Sedarski - joseph.g.sedarski@xcelenergy.com
- ☐ Members of the public who requested notice:

  Consultant: Westwood Professional Services (Kelly Kunst) - kelly.kunst@westwoodps.com
  City of Orono (Christine Mattson) - cmattson@ci.orono.mn.us

- ☒ Corps of Engineers Project Manager Melissa Jenny - melissa.m.jenny@usace.army.mil
- ☐ BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. MAILING INFORMATION

➢For a list of BWSR TEP representatives: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf

➢For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf

➢Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

➢For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687 or send to:

US Army Corps of Engineers
St. Paul District, ATTN: OP-R
180 Fifth St. East, Suite 700
St. Paul, MN 55101-1678

➢For Wetland Bank Plan applications, also send a copy of the application to:

Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:

- ☐
- ☐
- ☐
- ☐
- ☐