	WETL	AND DETER		ON DATA	FORM -	Midwes	t Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Marti	า	Sampling Date	: 10/21/2022
Applicant/Owner:	L	ake Charlotte So	olar, LLC		State:	MN	Sampling Point	NWA062A
Investigator(s):	Ap	oryl Jennrich		Sectio	on, Townshij	o, Range:	Sec	c.16 T103N R30W
Landform (hillslope, terrac	e, etc.):	Plair	۱	Local re	elief (concav	/e, convex	, none):	None
Slope (%): 0	Lat:	43.72749		Long:	-94.434	46	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gl	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic cor	nditions of the	e site typical for	this time o	of the year?	Yes (lf no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumst	ances present? No
Are vegetation	, soil	, or hydrology		naturally prol	blematic?	(If ne	eded, explain a	any answers in remarks.)
SUMMARY OF FIND	NGS							
Hydrophytic Vegetati	on Present?	No						
Hydric Soil Present?		No		Is the sa	mpled area	within a	wetland?	No
Wetland Hydrology P	'resent?	No		lf yes, op	tional wetla	nd site ID:		
Remarks:								
Recently tilled agricultur			0	al field.				
VEGETATION USE	; SCIEITUIIC	•		Dominant	Indicator	Domir	nance Test Wo	rksheet
Tree Stratum (Pl	lot size:)	% Cover		Status	Domin		i koncet
1.		/	,	openie	Clarue		er of Dominant Sp e OBL, FACW, or	
2.								
3							lumber of Domin s Across All Stra	0 (D)
4 5							t of Dominant Sp e OBL, FACW, or	
		-		=Total Cover	r			
Sapling/Shrub Stratum	(Plot size:)					lence Index W	
1							% Cover of:	Multiply by:
								x 1 =
3							V species	x 2 =
4 5.							species	x 3 = x 4 =
0				=Total Cover	r		pecies	x 5 =
Herb Stratum	(Plot size:)					n totals	(A) (B)
1.	· _	,					lence Index = B	
2.								
3.						Hydro	ophytic Vegeta	tion Indicators:
4.							Rapid test for h	ydrophytic vegetation
5							Dominance test	
						_	Prevalence inde	
7								adaptations* (provide
8								in Remarks or on a
9 10.						_	separate sheet)	drophytic vegetation*
10				=Total Cover	r		(explain)	
Woody Vine Stratum 1.)			ſ	*Indicato	,	nd wetland hydrology must be or problematic
2				=Total Cover	r	Veç	drophytic getation sent?	<u>No</u>
Remarks: (Include photo r Recently tilled agricultural			te sheet)					

NWA062A

Depth	Matrix	Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-34	10YR 2/1	100					Clay Loam	
34-36	2.5Y 3/2	90	2.5Y 4/2	10	D	М	Clay Trace Grave	al
34-30	2.51 3/2	90	2.51 4/2	10	D	IVI		
	Concentration, D	= Deple	etion, RM = Redu	Iced Mat	rix, MS =	Masked S		ocation: PL = Pore Lining, M = Mat
•	Indicators:							Problematic Hydric Soils*:
	stosol (A1)				ed Matrix	(S4)		rie Redox (A16) (LRR K, L, R)
	stic Epipedon (A2)			ndy Redo				ce (S7) (LRR K, L)
	ack Histic (A3)			• •	atrix (S6)			anese Masses (F12) (LRR K, L, R)
	drogen Sulfide (A				ky Minera			ow Dark Surface (TF12)
	ratified Layers (A5)			ed Matrix	: (F2)	Other (exp	lain in remarks)
	cm Muck (A10)				atrix (F3)			
	pleted Below Darl		· · · · · · · · · · · · · · · · · · ·		Surface	· ·		
	ick Dark Surface (ark Surfac			ydrophytic vegetation and wetland
	andy Mucky Minera			dox Depi	ressions (F8)	hydrology must problematic	be present, unless disturbed or
5 0	cm Mucky Peat or	Peat (S	3)				problematic	
estrictive L	ayer (if observed	l):						
уре:							Hydric Soil P	resent? No
	`				-			
Depth (inches Remarks:	5): 				-			
Remarks:					-			
Remarks:	GY				-			
Remarks: IYDROLO Vetland Hyd	GY Irology Indicators			III that an	- -			
temarks: IYDROLO Vetland Hyd	GY Irology Indicators ators (minimum of		required; check a			13)	Secondary	Indicators (minimum of two required
IYDROLO Vetland Hyd rimary Indica Surfac	GY Irology Indicators ators (minimum of e Water (A1)		required; check a	Aquatic	Fauna (B	,	Secondary Su	Indicators (minimum of two required
IYDROLO Vetland Hyd rimary Indica Surfac High V	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; check a	Aquatic True Aq	Fauna (B Juatic Plar	nts (B14)	Secondary Su Dr.	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10)
emarks: IYDROLO /etland Hyd rimary Indica Surfac High V Satura	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		required; check a	Aquatic True Aq Hydroge	Fauna (B Juatic Plar en Sulfide	nts (B14) Odor (C	<u>Secondary</u> Su Dr. 1)Dr	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2)
IYDROLO Vetland Hyd rimary Indica Surfac High V Satura Water	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		required; check a	Aquatic True Aq Hydroge Oxidized	Fauna (B Juatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	<u>Secondary</u> Su Dr. 1)Dr LivingCr.	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
IYDROLO Vetland Hyd rimary Indica Surfac High V Satura Water Sedim	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		required: check a	Aquatic True Aq Hydroge Oxidized Roots (0	Fauna (B Juatic Plar en Sulfide d Rhizosp C3)	nts (B14) Odor (C oheres on	Secondary Su Dr. 1) Dr Living Cr. Sa	Indicators (minimum of two required Irface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C
IYDROLO Vetland Hyd rimary Indica Surfac High V Satura Water Sedim Drift D	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		required; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presence	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C ² wheres on	<u>Secondary</u> Su Dr 1)Dr LivingCr Sa (C4)Stu	Indicators (minimum of two required Irface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1)
IYDROLO Vetland Hyd rimary Indica Surfac High V Satura Water Sedim Drift D Algal N	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		required; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presence	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C ² wheres on	Secondary	Indicators (minimum of two required Irface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C
temarks: IYDROLO Vetland Hyd Vetland Hyd Vetland Hyd Surfac Urimary Indica Surfac Surfac Urimary Indica Surfac Urimary Indica Surfac Indica In	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	<u>one is i</u>		Aquatic True Aq Hydroge Oxidizee Roots (0 Presenc Recent (C6)	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron uction in T	Secondary	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1) comorphic Position (D2)
IYDROLO Vetland Hyd rimary Indica Surfac High V Satura Vater Sedim Drift D Algal M Iron De Inunda	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	<u>one is i</u> rial Ima	 gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (0 Presend Recent (C6) Thin Mu	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Secondary	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1) comorphic Position (D2)
emarks: IYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tition Visible on Ae	one is i rial Ima cave Su	 gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Secondary Su Dr. 1)Dr LivingCr Sa (C4)Stu illed SoilsGe FA	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1) comorphic Position (D2)
Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Da Inunda Sparse Water-	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E	one is i rial Ima cave Su	 gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Secondary Su Dr. 1)Dr LivingCr Sa (C4)Stu illed SoilsGe FA	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1) comorphic Position (D2)
Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Water- Vater-	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E rations:	one is i rial Ima cave Su	 gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da	nts (B14) Odor (C oheres on ucced Iron uction in T ce (C7) ata (D9) Remarks	Secondary Su Dr. 1)Dr LivingCr Sa (C4)Stu illed SoilsGe FA	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1) comorphic Position (D2) AC-Neutral Test (D5)
Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: er Present?	one is i rial Ima cave Su 39)	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc (C6) Thin Mu Gauge C Other (E X X	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ick Surfac or Well Da Explain in	nts (B14) Odor (C oheres on ucced Iron uction in T ee (C7) ata (D9) Remarks	Secondary Su Dr. 1)Dr LivingCr Sa (C4)Stu illed SoilsGe FA	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1) comorphic Position (D2) IC-Neutral Test (D5) Wetland Hydrology
Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Water- Sield Observ Surface Water Surface Water Saturation Press	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E Pations: er Present? Present? esent?	rial Ima cave Su 39) Yes	gery (B7) urface (B8) No	Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge C Other (E	Fauna (B juatic Plan en Sulfide d Rhizosp C3) ce of Redu lron Redu ack Surfac or Well Da Explain in	nts (B14) Odor (C oheres on ucced Iron uction in T ce (C7) ata (D9) Remarks nches):	Secondary Su Dr. 1)Dr LivingCr Sa (C4)Stu illed SoilsGe FA	Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C unted or Stressed Plants (D1) comorphic Position (D2) AC-Neutral Test (D5)
Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse Water- Sield Observ Surface Water Saturation Pro- includes cap	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E vations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X X	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ick Surfac or Well Da Explain in Depth (iii Depth (iii	nts (B14) Odor (Coheres on ucced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Secondary	Indicators (minimum of two required Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C Inter or Stressed Plants (D1) womorphic Position (D2) IC-Neutral Test (D5) Wetland Hydrology Present? No
Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse Water- Sield Observ Surface Water Saturation Pro- includes cap	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E vations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X X	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ick Surfac or Well Da Explain in Depth (iii Depth (iii	nts (B14) Odor (Coheres on ucced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Secondary Su Dr. 1)Dr LivingCr Sa (C4)Stu illed SoilsGe FA	Indicators (minimum of two required Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C Inter or Stressed Plants (D1) womorphic Position (D2) IC-Neutral Test (D5) Wetland Hydrology Present? No
emarks: IYDROLO Vetland Hyd rimary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Water- ield Observ Vater Table F aturation Pro- ncludes cap	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E vations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X X	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ick Surfac or Well Da Explain in Depth (iii Depth (iii	nts (B14) Odor (Coheres on ucced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Secondary	Indicators (minimum of two required Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C Inter or Stressed Plants (D1) womorphic Position (D2) IC-Neutral Test (D5) Wetland Hydrology Present? No
emarks: IYDROLO Vetland Hyd rimary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Water- ield Observ Vater Table F aturation Pro- ncludes cap	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E vations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X X	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ick Surfac or Well Da Explain in Depth (iii Depth (iii	nts (B14) Odor (Coheres on ucced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Secondary	Indicators (minimum of two required Indicators (minimum of two required Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) Ituration Visible on Aerial Imagery (C Inter or Stressed Plants (D1) womorphic Position (D2) IC-Neutral Test (D5) Wetland Hydrology Present? No













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Feature ID: NWA062

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate

Aerial Photograph Review

	WETL	AND DETER	MINATI	ON DATA	FORM -	Midwes	t Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Marti	n	Sampling Date:	10/21/2022
Applicant/Owner:	La	ake Charlotte So	lar, LLC		State:	MN	Sampling Point:	NWA063A
Investigator(s):	Ap	oryl Jennrich		Sectio	on, Townshi	p, Range:	Sec	2.16 T103N R30W
Landform (hillslope, terra	ce, etc.):	Plain		Local r	elief (conca	ve, convex	, none):	None
Slope (%): 1	Lat:	43.72826		Long:	-94.43	323	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gle	encoe complex, () to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic co	onditions of the	e site typical for t	his time o	of the year?	Yes	If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumsta	ances present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain a	any answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	tion Present?	No						
Hydric Soil Present	?	No		Is the sa	mpled are	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes, op	tional wetla	and site ID:	:	
Remarks:								
Recently tilled agricultu	ıral field. Red	cently harvested	agricultur	al field.				
VEGETATION Us	e scientific	names of pla	nts.					
		ŀ	Absolute	Dominant	Indicator	Domir	nance Test Wor	ksheet
Tree Stratum (F	Plot size:)	% Cover	Species	Status		er of Dominant Sp e OBL, FACW, or	
2 3							lumber of Domina s Across All Strat	0 (D)
4 5							at of Dominant Sp e OBL, FACW, or	
		、 —		=Total Cove	r	D		
Sapling/Shrub Stratum	(Plot size:)					Ilence Index Wo % Cover of:	
1 2.							species	Multiply by: x 1 =
3.							/ species	x 2 =
4.							species	x 3 =
5.							species	x 4 =
				=Total Cove	r		pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1.						Preva	lence Inde $x = B/$	/A =
2.								
3						Hydro	ophytic Vegetat	ion Indicators:
4								drophytic vegetation
							Dominance test	
						_	Prevalence inde	
7								daptations* (provide
8 9.								in Remarks or on a
9 10.							separate sheet) Problematic byd	lrophytic vegetation*
10				=Total Cove	r		(explain)	
Woody Vine Stratum 1.	(Plot size:					*Indicato	/	nd wetland hydrology must be or problematic
2				=Total Cove	r	Veg	drophytic getation sent?	No
Remarks: (Include photo Recently tilled agricultura			e sheet)					

NWA063A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Re	dox Feat	tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-16	10YR 2/1	100					Clay			
16-22	2.5Y 4/2	100					Sandy Clay Trace Gravel			
10 22	2.01 4/2	100								
*Type: C =	Concentration, D	= Deple	etion, RM = Redu	iced Mati	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix		
Hydric Soil								ematic Hydric Soils*:		
His	stosol (A1)				ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)		
His	stic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)		
	ack Histic (A3)			ipped Ma	. ,			Masses (F12) (LRR K, L, R)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12)										
Stratified Layers (A5)Loamy Gleyed Matrix (F2)Other (explain in remarks)										
2 cm Muck (A10) Depleted Matrix (F3)										
	pleted Below Darl		· · ·		Surface	. ,				
Th	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)		nytic vegetation and wetland		
Sandy Mucky Mineral (S1) Redox Depressions (F8) hydrology must be present, unless disturbed or										
5 0	cm Mucky Peat or	Peat (S	3)				problematic			
Restrictive L	ayer (if observed):								
Туре:					_		Hydric Soil Preser	nt? No		
Depth (inches	s):				-					
HYDROLO	GY									
Wetland Hyd	rology Indicators	:								
Primary Indica	ators (minimum of	one is r	equired; check a	II that ap	ply)		Secondary Indica	ators (minimum of two required)		
Surfac	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)		
	Vater Table (A2)			True Aq	uatic Plai	nts (B14)	Drainag	e Patterns (B10)		
°	tion (A3)				en Sulfide	. ,		son Water Table (C2)		
Water	Marks (B1)				d Rhizosp		· ·	Burrows (C8)		
Sedime	ent Deposits (B2)			Roots (0				on Visible on Aerial Imagery (C9)		
Drift De	eposits (B3)			Presenc	e of Red	uced Iron	n (C4) Stunted	or Stressed Plants (D1)		
Algal N	/lat or Crust (B4)			Recent	Iron Redu	uction in T		phic Position (D2)		
	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)		
	tion Visible on Ae				ick Surfac					
	ely Vegetated Con		Irface (B8)	-	or Well Da					
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	S)			
Field Observ					_					
Surface Wate		Yes	No	X	Depth (i		We	etland Hydrology		
Water Table F		Yes	No	X	Depth (i			Present?		
Saturation Pre		Yes	No	Х	Depth (i	ncnes):		No		
· ·	includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Describe Rec	ordeu Dala (Sliedi	n yauye	s, monitoring wei	i, actial þ	notos, pl	CVIOUS IN	ispections), il available.			
Remarks:										





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

TETRA

A1





Feature ID: NWA063

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- —— Index
- ----- Intermediate



Aerial Photograph Review



							-		40/04/0000
Project/Site: Applicant/Owner:	Lake Cl	Lake Charlotte So		County:	Mart State:	MN	Sampling E Sampling P	-	10/21/2022 NWA064A
Investigator(s):		Apryl Jennrich	Jiai, LLC	Socti	on, Townsh				03N R30W
Landform (hillslope, terrace		Plair			elief (conca	-		Sec. 10 11	None
Slope (%): 0	Lat:	43.72948	I	Locari Long:	-94.43	-	Datum:		WGS84
· · · · ·		Glencoe complex,	0 to 2 per			1 Classific	· _		NA
Are climatic/hydrologic cor		-					lain in remar	ke)	
		, or hydrology		Significantly			"normal circu	,	oresent? No
Are vegetation	, soil	, or hydrology		naturally pro					swers in remarks.)
SUMMARY OF FIND		, or hydrology			blematic:	(ii rie	eeded, expla	ani any an	wers in remarks.)
Hydrophytic Vegetation	on Present	? <u>No</u>							
Hydric Soil Present?		No		Is the sa	ampled are	a within a	wetland?		No
Wetland Hydrology P	resent?	No		lf yes, or	ptional wetla	and site ID	:		
Remarks:									
VEGETATION Use	scientifi	•							
T 0		,		Dominant	Indicator	Domi	nance Test	Workshee	(
Tree Stratum (Pl	ot size:)	% Cover	Species	Status		er of Dominar e OBL, FACV		(A)
2 3							Number of Do es Across All		(B)
4 5							nt of Dominar e OBL, FACV		<u>%</u> (A/B)
		-		=Total Cove	er				
	(Plot size:)					alence Index		
1							% Cover of:		lultiply by:
2 3							species	x 1 = x 2 =	
4.							N species _ species		
5.							J species	x 4 =	
· · · · · · · · · · · · · · · · · · ·				=Total Cove	er		species	x 5 =	
Herb Stratum	(Plot size:)		-		Colur	nn totals	(A)	(B)
1 2.		`				Preva	alence Index	= B/A =	
3.						Hydr	ophytic Veg	etation Ind	licators:
4.									tic vegetation
5							Dominance	test is >50	%
6							Prevalence	index is ≤3	.0*
7									ons* (provide
8									harks or on a
9							separate sh		· · · · · · · · · · · · · · · · · · ·
10				Tatal Caus	-			: nyaropnyt	c vegetation*
)		=Total Cove	F	*Indicate	(explain) ors of hydric s , unless disturl		nd hydrology must be ematic
1 2				=Total Cove	er	Ve	drophytic getation esent?	No	
Remarks: (Include photo n Agricultural field. Bare grou			e sheet)						

NWA064A

Depth (inches):	Profile Descr	ription: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Chronessi Color (moist) % Type* Lot** Texture Remarks 0-20 10YR 2/1 100 Image: Clay Learning	Depth	Matrix		Re	dox Feat	ures					
20-23 2.5Y 3/2 100		Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
23-26 2.5V S/1 100 Image: construction in the second	0-20	10YR 2/1	100					Clay Loam			
23-26 2.5V S/1 100 Image: construction in the second	20-23	2.5Y.3/2	100					Sandy Clay			
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Localion: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soile*: Hydric Soil Indicators: Indicators (C) Histic Epipedion (A2) Sandy Redx (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Gleyd Matrix (S6) Black Histic (A3) Dark Surface (F12) Other Component Sulface (A1) Depleted Matrix (S6) Depleted Below Dark Surface (A1) Redox Dark Surface (F6) Depleted Below Dark Surface (A1) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Matrix (F3) G cm Mucky Peat or Peat (S3) Redox Depressions (F8) Type: Hydric Soil Present? No Aquatic Fauna (B13) Surface Soil Cracks (B6) Drink Dark (B1) Outrace (A1) Dacket C (A1) Secondary Indicators Imimum of one is required, check all that apply) Secondary Indicators (IB) Drink Case (B6) Wettand Hydrology Indicators Prove Angenee C (C1) Dry-Season Water (A1) Dry Congenee Plants (D1) Surface S01 Control Cuse Presence of Reduced Inon (C1) Saturation (A3)											
Hydric Soll Indicators:	23-26	2.5 ¥ 5/1	100					Sandy Clay			
Hydric Soll Indicators:											
Hydric Soll Indicators:											
Hydric Soll Indicators:											
Hydric Soll Indicators:											
Hydric Soll Indicators:											
Hydric Soll Indicators:											
Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (A10) (LRR K, L, R) Black Histic (A3) Stripped Matrix (S6) Dark Surface (A12) (LRR K, L, R) Yery Shallow Dark Surface (A12) Depleted Matrix (F2) Other (explain in remarks) Depleted Batrix (F3) Depleted Matrix (F3) Other (explain in remarks) Muck (A10) Depleted Matrix (F3) Other (explain in remarks) Depleted Batrix (F3) Redox Dark Surface (F6) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Depleted Batrix (F3) No Depth (inches): Mydric Soil Present? No Primary Indicators (Ininimum of one is required; check all that apply) Secondary Indicators (Ininimum of two required) Surface Water (A1) Aquatic Plants (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patemas (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidzed Rhizospheres on Living Saturation Visible on Aerial Imagery (C9) Sofiface Water (= Deple	tion, RM = Redu	ced Matr	rix, MS =	Masked		0		
Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L) Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Depressions (F8) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Type:	-						(0.1)		•		
Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, R) Hydrogen Sulfide (A4) Learny Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Other (explain in remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric Soil Present? No Type: Depleted Below Dark Surface (A12) Peleted Dark Surface (F7) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: No		. ,					(S4)				
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Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) 2 cm Muck (A10) Depleted Matrix (F3) The dox Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Sandy Mucky Peat or Peat (S3) Redox Depressions (F8) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric Soil Present? No Depleted Matrix (F2) Hydric Soil Present? No Bicarbonate HYDROLOCY Wettand Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Flants (B14) Drainage Patterns (B10) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Craytish Burrows (C8) Sectiment Deposits (B2) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) In on Deposits (B5) (C6)<		()			••	. ,			()())		
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			,								
Restrictive Layer (if observed): Hydric Soil Present? No Restrictive Layer (if observed): Hydric Soil Present? No Depth (inches):			. ,		dox Depr	essions (F8)		esent, unless disturbed or		
Type:	50	m Mucky Peat or	Peat (S	3)				problemade			
Depth (inches):	Restrictive L	ayer (if observed):								
Remarks: Bicarbonate HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stuned or Stressed Plants (D1) Agal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Mo Surface Water Present? Yes No X Depth (inches): Mo Saturation Present? Yes	Туре:							Hydric Soil Presen	t? <u>No</u>		
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High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Water -Stained Leaves (B9) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Wetland Hydrology Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No No Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	Primary Indica	ators (minimum of	one is r	equired; check a	ll that ap	<u>ply)</u>		Secondary Indica	ators (minimum of two required)		
Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Saturation Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No No	Surfac	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)		
Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water Table Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): No No Saturation Present? Yes No X Depth (inches): No No Saturation Present? Yes No X Depth (inches): No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Model No	High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)		
Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Vester-Stained Leaves (B9) Water-Stained Leaves (B9) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Cincludes capillary fringe) Depth (inches): No No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No	Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)		
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Water Stained Leaves (B9) Other (Explain in Remarks) Wetland Hydrology Present? Field Observations: Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? No Saturation Present? Yes No X Depth (inches): No No Saturation Present? Yes No X Depth (inches): No No Cincludes capillary fringe) No X Depth (inches): No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Sturiable:	Water	Marks (B1)			Oxidized	d Rhizosp	heres or	Living Crayfish	Burrows (C8)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? No X Depth (inches): No No Saturation Present? Yes No X Depth (inches): Mater Table Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Mo X Depth (inches): No No No Saturation Present? Yes No X Depth (inches): No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No No	Sedime	ent Deposits (B2)			Roots (C	C3)		Saturatio	on Visible on Aerial Imagery (C9)		
Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches): Other (includes capillary fringe) No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches): Present? (includes capillary fringe) No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	-					Iron Redu	uction in ⁻				
Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Present? Saturation Present? Yes No X Depth (inches): Present? No Saturation Present? Yes No X Depth (inches): No No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							(- -)	FAC-Ne	utral Test (D5)		
Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Ves No X Depth (inches): Wetland Hydrology Present? Surface Water Present? Yes No X Depth (inches): Present? Present? No Water Table Present? Yes No X Depth (inches): Present? Present? No Saturation Present? Yes No X Depth (inches): No No No (includes capillary fringe) No X Depth (inches): No No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Saturations in the second stream gauge			•				. ,				
Field Observations: No X Depth (inches): Wetland Hydrology Surface Water Present? Yes No X Depth (inches): Present? Water Table Present? Yes No X Depth (inches): Present? Present? Saturation Present? Yes No X Depth (inches): Present? No (includes capillary fringe) No X Depth (inches): No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: If available:				irface (B8)	. 0		• •	`			
Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? Water Table Present? Yes No X Depth (inches): Present? No Saturation Present? Yes No X Depth (inches): Present? No (includes capillary fringe) No X Depth (inches): No No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Stream gauge No No	water-	Stained Leaves (E	39)		Other (E	xplain in	Remarks	\$) 			
Water Table Present? Yes No X Depth (inches): Wetland Hydrology Present? Present? No Saturation Present? Yes No X Depth (inches): Present? No (includes capillary fringe) No X Depth (inches): No No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No No											
Water rable Present? Yes No X Depth (inclus): Present? Saturation Present? Yes No X Depth (inclus):								We	tland Hydrology		
(includes capillary fringe)						• • •	-		Present?		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
			ກ ຕອບຕະ	e, monitoring wel	l, aerial r	photos pr	evious in	spections), if available:			
Remarks:			googt	.,	.,		2				
Remarks:											
	Remarks:										











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Feature ID: NWA064

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



		LAND DETER			A FORM -	Midwes	t Region	
Project/Site:	Lake Ch			County:	Marti		Sampling Date:	10/21/2022
Applicant/Owner:		Lake Charlotte Sc	lar, LLC		State:	MN	Sampling Point:	NWA065A
Investigator(s):		Apryl Jennrich			ion, Townshij	-	-	.9 T103N R30W
Landform (hillslope, terra	. ,	Plain			relief (concav			None
Slope (%): 0	Lat:	43.73125		Long:	-94.433		Datum:	WGS84
Soil Map Unit Name:		Glencoe complex,				I Classifica		NA
Are climatic/hydrologic c				•	· `		,	
	, soil	, or hydrology		-	y disturbed?		normal circumsta	· · · · · · · · · · · · · · · · · · ·
Are vegetation SUMMARY OF FIN	, soil	, or hydrology		naturally pr	oblematic?	(If ne	eded, explain ar	ny answers in remarks.)
Hydrophytic Veget	ation Present	? No						
Hydric Soil Presen	t?	No		Is the s	ampled area	within a	wetland?	No
Wetland Hydrology	/ Present?	No		lf yes, c	ptional wetla	nd site ID:		
Remarks:								
Recently tilled agricult			0	al field.				
VEGETATION U	se scientifi			-				•
Troc Strotum				Dominant	Indicator	Domir	nance Test Work	sheet
Tree Stratum 1.	(Plot size:)	% Cover	Species	Status		er of Dominant Spe e OBL, FACW, or I	a (a)
2. 3.							lumber of Dominar s Across All Strata	0 (D)
4 5							t of Dominant Spe e OBL, FACW, or I	
		_		=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:)				Preva	llence Index Wo	[·] ksheet
1							% Cover of:	Multiply by:
							species	_ x 1 =
3							V species	_ x 2 =
4 5.							species	x 3 = x 4 =
J				=Total Cov	er			x 5 =
Herb Stratum	(Plot size:) —					nn totals	(A) (B)
1.	,	/					lence Index = B/A	- · · · · · · · · · · · · · · · · ·
2.						_		
3						Hydro	phytic Vegetation	on Indicators:
4.							Rapid test for hyd	drophytic vegetation
5.							Dominance test is	s >50%
6							Prevalence index	is ≤3.0*
7								aptations* (provide
8								n Remarks or on a
							separate sheet)	
10				T () O			-	ophytic vegetation*
		,		=Total Cov	er		(explain)	
Woody Vine Stratum 1.)					ors of hydric soil and unless disturbed or	l wetland hydrology must be problematic
2							drophytic	
		_		=Total Cov	er	-	jetation sent?	lo_
Remarks: (Include photo	o numbers he	re or on a separat	e sheet)				<u> </u>	
Recently tilled agricultur	al field. Some	e dead barnyard g	ass prese	ent. Bare gro	ound: 100%			

NWA065A

Profile Descr	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		R	edox Fea	tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-35	10YR 2/1	100					Clay			
35-37	2.5Y 4/2	100					Sandy Clay			
37-39	2.5Y 4/3	97	10YR 5/6	3	С	PL	Sandy Clay	Distinct or Prominent		
*Type: C =	Concentration, D	= Deple	etion, RM = Red	uced Mat	rix, MS =	Masked \$	Sand Grains. **Locati	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:		
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)		
His	stic Epipedon (A2))	Sa	ndy Red	ox (S5)		Dark Surface (S	7) (LRR K, L)		
Bla	ack Histic (A3)		St	ripped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)		
Hy	drogen Sulfide (A	4)	Lc	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)		
Str	atified Layers (A5	5)	Lc	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)		
2 c	m Muck (A10)		De	pleted M	atrix (F3)					
De	pleted Below Darl	k Surfac	æ (A11) Re	dox Dark	Surface	(F6)				
Th	ick Dark Surface ((A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hvdrop	hytic vegetation and wetland		
Sa	ndy Mucky Minera	al (S1)	Re	dox Depi	ressions (F8)	hydrology must be pi	esent, unless disturbed or		
5 cm Mucky Peat or Peat (S3)							problematic			
Restrictive L	ayer (if observed	b:								
Type:		.,.					Hydric Soil Preser	nt? No		
Depth (inches	a):				-					
	-				_					
Remarks:										
	<u></u>									
HYDROLO										
•	rology Indicators ators (minimum of		aquirad: abaak	all that an			Secondary India	ators (minimum of two required)		
		0110 15 1	equired, check			(10)		ators (minimum of two required)		
	e Water (A1)				Fauna (B	,		Soil Cracks (B6)		
	/ater Table (A2)			-	Juatic Plai	. ,		e Patterns (B10)		
	tion (A3)				en Sulfide			son Water Table (C2)		
	Marks (B1)				d Rhizosp	neres on		Burrows (C8)		
	ent Deposits (B2)			Roots (ce of Red	upped Iron		on Visible on Aerial Imagery (C9)		
	eposits (B3) /at or Crust (B4)			-			· · ·	or Stressed Plants (D1) phic Position (D2)		
	eposits (B5)			(C6)	non Keut			utral Test (D5)		
	tion Visible on Ae	rial Ima	nery (B7)	- ` `	ick Surfac	re (C7)				
	ly Vegetated Con			-	or Well Da	. ,				
	Stained Leaves (E			- 0	Explain in	• •	3)			
	`					. tomante	-,			
Field Observ Surface Wate		Yes	No	х	Denth /	nchee).				
Water Table F		Yes	No		Depth (in Depth	· _	We	etland Hydrology		
Saturation Pre		Yes	No	X	Depth (i			Present? No		
(includes capi			110		(1)					
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
	`	2 0	Ŭ		••					
Remarks:					_					





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWA065

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WETL	AND DETER	MINATI	ON DATA	FORM -	Midwes	st Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Marti	n	Sampling Date:	10/21/2022
Applicant/Owner:	La	ake Charlotte Sc	olar, LLC		State:	MN	Sampling Point:	NWA066A
Investigator(s):	Ap	oryl Jennrich		Sectio	on, Townshi	p, Range:	Sec.	16 T103N R30W
Landform (hillslope, terra	ice, etc.):	Plain	1	Local r	elief (conca	ve, convex	(, none):	None
Slope (%): 1	Lat:	43.73102		Long:	-94.433	306	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gle	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic c	onditions of the	site typical for t	this time c	of the year?	Yes (If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumsta	nces present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain ar	y answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	tion Present?	No						
Hydric Soil Present	?	No		Is the sa	mpled area	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes, op	otional wetla	nd site ID:	:	
Remarks:								
Recently tilled agricultu	ural field. Red	cently harvested	agricultur	al field.				
VEGETATION ປຣ	se scientific	names of pla	ants.					
		I	Absolute	Dominant	Indicator	Domir	nance Test Work	sheet
Tree Stratum (I	Plot size:)	% Cover	Species	Status		er of Dominant Spe e OBL, FACW, or F	
3.							lumber of Dominar s Across All Strata	0 (D)
4 5							nt of Dominant Spe e OBL, FACW, or F	
		、 —		=Total Cove	r			1
Sapling/Shrub Stratum	(Plot size:)					Ilence Index Wor % Cover of:	
1 2.							species	Multiply by: x 1 =
3.							V species	x 2 =
4.							species	x 3 =
5.							l species	x 4 =
·				=Total Cove	r		species	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1.						Preva	lence Index = B/A	\ =
2.								
3						Hydro	ophytic Vegetatio	on Indicators:
4								Irophytic vegetation
							Dominance test is	
							Prevalence index	
7								aptations* (provide
8 9.								n Remarks or on a
9 10							separate sheet) Problematic bydr	ophytic vegetation*
10				=Total Cove	r		(explain)	
Woody Vine Stratum	(Plot size:					*Indicato	,	wetland hydrology must be problematic
2				=Total Cove	r	Veg	drophytic getation sent? <u>N</u>	0
Remarks: (Include photo Recently tilled agricultura			e sheet)					

NWA066A

Profile Descr	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Re	dox Fea							
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks			
0-21	10YR 2/1	100			51		Clay				
		-		40			-				
21-23	10YR 2/1	90	2.5Y 3/2	10	D	М	Clay				
23-33	2.5Y 3/1	90	2.5Y 4/2	10	D	М	Clay				
33-38	2.5Y 4/3	99	2.5Y 5/6	1	С	PL	Clay	Distinct or Prominent			
		1									
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mat	rix, MS =	Masked S	Sand Grains. **Locatio	on: PL = Pore Lining, M = Matrix			
Hydric Soil			,		,			ematic Hydric Soils*:			
-	stosol (A1)		Sa	ndv Glev	ed Matrix	(S4)		dox (A16) (LRR K, L, R)			
	stic Epipedon (A2)			ndy Redo		(-)	Dark Surface (S7				
	ack Histic (A3)			-	atrix (S6)			Masses (F12) (LRR K, L, R)			
	drogen Sulfide (A	4)		•••	ky Minera	al (F1)		rk Surface (TF12)			
	atified Layers (A5			•	ed Matrix	. ,	Other (explain in				
	m Muck (A10))				(i <u>2</u>)		remains)			
2 cm Muck (A10) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6)											
Sandy Mucky Mineral (S1) Redox Depressions (F8) hydrology must be present, unless disturbed or problematic											
	in Mucky Feat Of	real (S	3)			1	•				
Restrictive L	ayer (if observed	l):									
Туре:					_		Hydric Soil Presen	t? <u>No</u>			
Depth (inches	s):				-						
Remarks:											
HYDROLO	GY										
	rology Indicators	5:									
-	ators (minimum of		equired; check a	all that ap	oply)		Secondary Indica	ators (minimum of two required)			
-	e Water (A1)				Fauna (B	(13)	Surface	Soil Cracks (B6)			
	/ater Table (A2)				juatic Plai			e Patterns (B10)			
0	tion (A3)				en Sulfide	` '		son Water Table (C2)			
	Marks (B1)				d Rhizosp		· ·	Burrows (C8)			
	ent Deposits (B2)			Roots (- · ·	on Visible on Aerial Imagery (C9)			
	eposits (B3)			-	ce of Red	uced Iron		or Stressed Plants (D1)			
	At or Crust (B4)			-				phic Position (D2)			
	eposits (B5)			(C6)				utral Test (D5)			
	tion Visible on Ae	rial Imag	gery (B7)		ick Surfac	ce (C7)					
	ly Vegetated Con			-	or Well Da						
·	Stained Leaves (E			-	Explain in		3)				
Field Observ	```	-		- ``	-						
Surface Wate		Yes	No	Х	Depth (i	nches):					
Water Table F		Yes	No	X	Depth (i	· _	We	tland Hydrology			
Saturation Pre		Yes	No	X	Depth (i			Present? No			
(includes capi					<u> </u>	, <u> </u>					
<u> </u>		m gauge	e, monitoring we	ll, aerial p	ohotos, pr	evious in	spections), if available:				
	-	-	-		,						
Remarks:											







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Feature ID: NWA066

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake C	harlotte	City/	County:	Martin	n	Sampling D	ate:	10/24/2022
Applicant/Owner:		Lake Charlotte S	olar, LLC		State:	MN	Sampling Po	oint:	NWB067A
Investigator(s):		Susan Mayer		Sectio	on, Township	p, Range:		Sec.16 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Plair	า	Local re	elief (concav	ve, conve	k, none):		None
Slope (%): 1	Lat:	43.7312		Long:	-94.437	'39	Datum:		WGS84
Soil Map Unit Name:	Canisteo-	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA
Are climatic/hydrologic co	nditions of	the site typical for	this time c	of the year?	Yes (lf no, expl	ain in remark	s)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	mstances	oresent? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, expla	in any ans	swers in remarks.)
SUMMARY OF FINE	VINGS								
Hydrophytic Vegetati	ion Present	t? No							
Hydric Soil Present?		No		Is the sa	mpled area	a within a	wetland?		No
Wetland Hydrology F	resent?	No		lf yes, op	tional wetla	nd site ID	:		
Remarks:									
Recently tilled agricultur		-	0	al field.					
VEGETATION Use	e scientif	ic names of pla		<u> </u>					
Troc Stratum (D	lot oizo:)		Dominant	Indicator	Domi	nance Test \	vorksnee	[
Tree Stratum (P	lot size:)	% Cover	Species	Status		er of Dominan		0 (4)
2						that ar	e OBL, FACW	, or FAC:	(A)
3.							Number of Dor s Across All S		(B)
4							nt of Dominan		
5				=Total Cover	r	that ar	e OBL, FACW	, or FAC:	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:) -				Preva	alence Index	Workshe	et
1.	(1 101 01201)					% Cover of:		lultiply by:
2.							species	x 1 =	
3.							V species	x 2 =	:
4.						FAC	species	x 3 =	
5.						FACL	J species		•
		-		=Total Cover	r	UPL	species	x 5 =	:
Herb Stratum	(Plot size:)				Colun	nn totals	(A)	(B)
1						Preva	lence Index	= B/A =	
2									
3							ophytic Veg		
4	-					_	•		tic vegetation
5 6							Dominance t Prevalence i		
7						_			ons* (provide
8.							supporting d		-
9.							separate she		
10.							Problematic	hydrophyt	c vegetation*
				=Total Cover	r		(explain)		
Woody Vine Stratum 1.)					ors of hydric so unless disturb		nd hydrology must be matic
2				=Total Cover	r	Veç	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

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Depth (Inches)	<u>Iviaui</u>	Matrix		Redox Features							
(1101100)	Color (moist)	%	Color (mois				Loc** Tex		cture	Remarks	
0-18	10YR 2/1	100	, , , , , , , , , , , , , , , , , , ,	,				Cla	iv		
	10YR 2/1	60							-		
18-23		60						Cla	ıy		
	2.5Y 5/3	40								Mixed Matrix	
*Type: C =	Concentration, D	= Deple	etion, RM = Re	educed	Matrix, N	NS = Ma	sked S	Sand Grains.	**Locatio	n: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:							Indicator	s for Proble	matic Hydric Soils*:	
Hi	stosol (A1)			Sandy (Gleyed N	/latrix (S4	4)	Coast Prairie Redox (A16) (LRR K, L, R)			
His	stic Epipedon (A2)			Sandy I	Redox (S	65)		Dark	Dark Surface (S7) (LRR K, L)		
Bla	ack Histic (A3)			Strippe	d Matrix	(S6)		Iron-I	Iron-Manganese Masses (F12) (LRR K, L, R)		
Hy	drogen Sulfide (A	4)		Loamy	Mucky N	lineral (F	-1)	Very	Very Shallow Dark Surface (TF12)		
St	ratified Layers (A5)		Loamy	Gleyed N	Matrix (F2	2)	Othe	r (explain in	remarks)	
2 0	cm Muck (A10)			Deplete	d Matrix	(F3)					
De	pleted Below Darl	k Surfac	e (A11)	Redox I	Dark Sur	face (F6	5)				
Th	ick Dark Surface ((A12)	· · _	Deplete	d Dark S	Surface (F7)	*Indicator	s of hydroph	wtic vegetation and wetland	
	andy Mucky Minera				Depressi				Indicators of hydrophytic vegetation and wetland ydrology must be present, unless disturbed or		
	cm Mucky Peat or	. ,			•	()		problema			
			,								
	ayer (if observed	l):						Ludria (Soil Brocon		
Type: <u>Roc</u> Depth (inches								пуштс	Soil Present	t? <u>No</u>	
2 op (o.											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
	GY					I					
HYDROLO	GY Irology Indicators	s:									
HYDROLO Wetland Hyd			equired; chec	k all tha	at apply)			Seco	ndary Indica	tors (minimum of two required)	
HYDROLO Wetland Hyd Primary Indic	rology Indicators		equired; chec		<u>at apply)</u> iatic Fau	na (B13))	Seco		tors (minimum of two required) Soil Cracks (B6)	
HYDROLO Wetland Hyd Primary Indic Surfac	Irology Indicators ators (minimum of e Water (A1)		equired; chec	Aqu	atic Fau			Seco	Surface S	Soil Cracks (B6)	
HYDROLO Wetland Hyd Primary Indic Surfac High V	Irology Indicators ators (minimum of		equired; chec	Aqu True	atic Fau e Aquatio	c Plants	(B14)	-	Surface S	Soil Cracks (B6) Patterns (B10)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; chec - - -	Aqu True Hyc	iatic Fau e Aquatio Irogen Si	c Plants ulfide Oc	(B14) dor (C1	1)	Surface S Drainage Dry-Seas	Soil Cracks (B6) Patterns (B10) son Water Table (C2)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		equired; chec - - -	Aqu True Hyc Oxie	atic Fau e Aquatio	c Plants ulfide Oc	(B14) dor (C1	1)	Surface S Drainage Dry-Seas Crayfish	Soil Cracks (B6) Patterns (B10)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired; chec - - - -	Aqu True Hyc Oxie Roc	uatic Fau e Aquatio Irogen Si dized Rh	c Plants ulfide Oc iizospher	(B14) dor (C1 res on	1) Living	Surface S Drainage Dry-Seas Crayfish Saturatio	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Satura Sedim Drift D	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; chec - - - -	Aqu True Hyc Oxie Roc Pre	uatic Fau e Aquatio Irogen Si dized Rh ots (C3) sence of	c Plants ulfide Oc iizospher Reduce	(B14) dor (C1 res on d Iron	1) Living	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal N	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired: chec - - - - -	Aqu True Hyc Oxie Roc Pre	atic Fau e Aquatic drogen So dized Rh ots (C3) sence of cent Iron	c Plants ulfide Oc iizospher Reduce	(B14) dor (C1 res on d Iron	1) Living (C4)	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron Du	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	<u>one is r</u>		Aqu True Hyc Oxie Roc Pre Rec (C6	atic Fau e Aquatic drogen So dized Rh ots (C3) sence of cent Iron	c Plants ulfide Oc nizospher Reduce Reductio	(B14) dor (C1 res on ed Iron on in T	1) Living (C4)	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Do	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	<u>one is r</u> rial Imag	 gery (B7)	Aqu Trua Hyc Oxia Roc Pre Rec (C6 Thir	uatic Fau e Aquatic drogen Si dized Rh ots (C3) sence of cent Iron)	c Plants ulfide Oc nizospher Reduce Reductio	(B14) dor (C1 res on d Iron on in T C7)	1) Living (C4)	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron Du Inunda Sparse	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae	<u>one is r</u> rial Imag cave Su	 gery (B7)	Aqu True Oxie Oxie Roc Pre Rec (C6 Thir Gau	uatic Fau e Aquatic drogen Si dized Rh ots (C3) sence of cent Iron) n Muck S	c Plants ulfide Oc izospher Reduce Reductio Gurface (f ell Data	(B14) dor (C1 res on d Iron on in T C7) (D9)	1) Living (C4) illed Soils	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse Water	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (B	<u>one is r</u> rial Imag cave Su	 gery (B7)	Aqu True Oxie Oxie Roc Pre Rec (C6 Thir Gau	iatic Fau e Aquatic frogen Si dized Rh ots (C3) sence of sent Iron) n Muck S uge or W	c Plants ulfide Oc izospher Reduce Reductio Gurface (f ell Data	(B14) dor (C1 res on d Iron on in T C7) (D9)	1) Living (C4) illed Soils	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron Do Inunda Sparse Water- Field Observ	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E vations:	one is r rial Imag cave Su 39)	gery (B7) urface (B8)	Aqu True Oxie Roc Pre Rec (C6 Chir Gau Oth	atic Fau e Aquatic frogen Si dized Rh ots (C3) sence of sent Iron) n Muck S uge or W er (Expla	c Plants ulfide Oc izospher Reduce Reductio Surface (f 'ell Data ain in Rei	(B14) dor (C1 res on d Iron on in T C7) (D9) marks	1) Living (C4) illed Soils	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron Du Inunda Sparse	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E rations: er Present?	<u>one is r</u> rial Imag cave Su	 gery (B7)	Aqu True Hyc Roc Roc Rec (C6 Thir Gau Oth	atic Fau e Aquatic frogen Si dized Rh ots (C3) sence of sent Iron) n Muck S uge or W er (Expla	c Plants ulfide Oc izospher Reduce Reductio Surface (l 'ell Data ain in Rei pth (inch	(B14) dor (C1 res on d Iron on in T C7) (D9) marks es):	1) Living (C4) illed Soils	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted c Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron Du Inunda Sparse Water- Field Observ Surface Wate	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (E rations: er Present?	rial Imag cave Su 39) Yes	gery (B7) 	Aqu True Oxie Roc Pre Rec (C6 Thir Gau Oth	atic Fau atic Fau dized Rh ots (C3) sence of sent Iron) n Muck S uge or W er (Expla (Dep (Dep	c Plants ulfide Oc izospher Reduce Reductio Surface (f 'ell Data ain in Rei	(B14) dor (C1 res on d Iron on in T (D9) marks res): es):	1) Living (C4) illed Soils	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted c Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron Du Inunda Sparse Water- Field Observ Surface Water	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: er Present? Present?	rial Imag cave Su 39) Yes Yes	gery (B7) 	Aqu True Oxie Roc Pre Rec (C6 Thir Gau Oth	atic Fau atic Fau dized Rh ots (C3) sence of sent Iron) n Muck S uge or W er (Expla (Dep (Dep	c Plants ulfide Oc izospher Reduce Reductio Gurface (I 'ell Data ain in Rei pth (inch pth (inch	(B14) dor (C1 res on d Iron on in T (D9) marks res): es):	1) Living (C4) illed Soils	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted c Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Du Inunda Sparse Water- Field Observ Surface Wate Water Table I Saturation Pr (includes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: er Present? Present?	rial Imag cave Su 39) Yes Yes Yes	gery (B7) 	Aqu True Oxie Roc Pre Rec (C6 Thir Gau Oth D D D D D	atic Fau e Aquatic frogen St dized Rh ots (C3) sence of cent Iron) n Muck S uge or W er (Expla <u>(Dep</u> (Dep	c Plants (ulfide Oc izospher Reduce Reductio Gurface (('ell Data ain in Rei pth (inch pth (inch pth (inch	(B14) dor (C1 res on d Iron on in T (D9) marks (D9) marks (es): es):		Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Du Inunda Sparse Water- Field Observ Surface Wate Water Table I Saturation Pr (includes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tition Visible on Ae ely Vegetated Con stained Leaves (E rations: er Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7) 	Aqu True Oxie Roc Pre Rec (C6 Thir Gau Oth D D D D D	atic Fau e Aquatic frogen St dized Rh ots (C3) sence of cent Iron) n Muck S uge or W er (Expla <u>(Dep</u> (Dep	c Plants (ulfide Oc izospher Reduce Reductio Gurface (('ell Data ain in Rei pth (inch pth (inch pth (inch	(B14) dor (C1 res on d Iron on in T (D9) marks (D9) marks (es): es):		Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Du Inunda Sparse Water- Field Observ Surface Wate Water Table I Saturation Pr (includes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tition Visible on Ae ely Vegetated Con stained Leaves (E rations: er Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7) 	Aqu True Oxie Roc Pre Rec (C6 Thir Gau Oth D D D D D	atic Fau e Aquatic frogen St dized Rh ots (C3) sence of cent Iron) n Muck S uge or W er (Expla <u>(Dep</u> (Dep	c Plants (ulfide Oc izospher Reduce Reductio Gurface (('ell Data ain in Rei pth (inch pth (inch pth (inch	(B14) dor (C1 res on d Iron on in T (D9) marks (D9) marks (es): es):		Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?	
HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Du Inunda Sparse Water- Field Observ Surface Wate Water Table I Saturation Pr (includes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tition Visible on Ae ely Vegetated Con stained Leaves (E rations: er Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7) 	Aqu True Oxie Roc Pre Rec (C6 Thir Gau Oth D D D D D	atic Fau e Aquatic frogen St dized Rh ots (C3) sence of cent Iron) n Muck S uge or W er (Expla <u>(Dep</u> (Dep	c Plants (ulfide Oc izospher Reduce Reductio Gurface (('ell Data ain in Rei pth (inch pth (inch pth (inch	(B14) dor (C1 res on d Iron on in T (D9) marks (D9) marks (es): es):		Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (CS or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

lotte ke Charlotte Sola san Mayer Depressio 43.72769 ncoe complex, 0 site typical for th , or hydrology , or hydrology , or hydrology <u>No</u> <u>Yes</u> <u>No</u>	on to 2 perc	Local r Long: cent slopes f the year? Significantly naturally pro	-94.438 NW Yes (disturbed? oblematic?	MN Sampling Point: NWB070A p, Range: Sec.16 T103N R30W ve, convex, none): Concave 802 Datum: WGS84 1 Classification: NA If no, explain in remarks) Are "normal circumstances present? No (If needed, explain any answers in remarks) a within a wetland? No
Depression 43.72769 ncoe complex, 0 site typical for th , or hydrology , or hydrology , or hydrology	to 2 pero	Local r Long: cent slopes f the year? Significantly naturally pro	relief (concav -94.438 NW Yes (disturbed? oblematic?	p, Range: Sec.16 T103N R30W ve, convex, none): Concave 302 Datum: WGS84 I Classification: NA If no, explain in remarks) Are "normal circumstances present? No (If needed, explain any answers in remar a within a wetland? No
Depression 43.72769 ncoe complex, 0 site typical for th , or hydrology , or hydrology , or hydrology	to 2 pero	Local r Long: cent slopes f the year? Significantly naturally pro	relief (concav -94.438 NW Yes (disturbed? oblematic?	ve, convex, none): Concave 802 Datum: WGS84 I Classification: NA If no, explain in remarks) Are "normal circumstances present? Na (If needed, explain any answers in remarks) a within a wetland? No
43.72769 ncoe complex, 0 site typical for th , or hydrology , or hydrology <u>No</u> <u>Yes</u>	to 2 pero	Long: cent slopes f the year? Significantly naturally pro	-94.438 NW Yes (disturbed? oblematic?	B02 Datum: WGS84 I Classification: NA If no, explain in remarks) Are "normal circumstances present? No (If needed, explain any answers in remarks) a within a wetland? No
site typical for th , or hydrology , or hydrology 	nis time o	f the year? Significantly naturally pro	Yes (v disturbed? oblematic?	If no, explain in remarks) Are "normal circumstances present? <u>No</u> (If needed, explain any answers in remar
site typical for th , or hydrology , or hydrology 	nis time o	f the year? Significantly naturally pro	ampled area	Are "normal circumstances present? <u>No</u> (If needed, explain any answers in remar
, or hydrology , or hydrology 		Significantly naturally pro	ampled area	Are "normal circumstances present? <u>No</u> (If needed, explain any answers in remar
No Yes		naturally pro	ampled area	a within a wetland? No
Yes			-	
Yes			-	
			-	
<u>No</u>		lf yes, o	ptional wetla	nd site ID:
	- 1 -			
		Deminent	la di seten	Deminence Test Werkehest
			Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
				Total Number of Dominant Species Across All Strata: 1 (B)
				Percent of Dominant Species that are OBL, FACW, or FAC: 0% (A/B)
		=Total Cove	er	
15)				Prevalence Index Worksheet
				Total % Cover of: Multiply by:
				$\begin{array}{c c} OBL \text{ species} & 0 & x \ 1 = & 0 \\ \hline & & & \\ \hline & & & \\ \hline \end{array}$
				FACW species $0 \times 2 = 0$ FAC species $0 \times 3 = 0$
				FACU species $0 \times 3 = 0$
		=Total Cove	er	$\begin{array}{c c} \hline & & \\ \hline & & \\ \hline \\ \hline$
5)				Column totals 50 (A) 250 (B
, '	50	Y	UPL	Prevalence Index = B/A = 5
				Hydrophytic Vegetation Indicators:
				Rapid test for hydrophytic vegetation
				Dominance test is >50%
				Prevalence index is ≤3.0*
				Morphological adaptations* (provide
				supporting data in Remarks or on a
				separate sheet)
	50	T () O		Problematic hydrophytic vegetation*
15)			er	 (explain) *Indicators of hydric soil and wetland hydrology mus present, unless disturbed or problematic
			er	Hydrophytic Vegetation Present? <u>No</u>
	A 30	30) % Cover 	Absolute Dominant 30	Absolute Dominant Indicator 30

NWB070A

Profile Descr	ription: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)	
Depth <u>Matrix</u>			Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-40	10YR 2/1	100					Clay		
							City		
*Type: C =	Concentration, D	= Deple	tion_RM = Redu	ced Mati	rix MS =	Masked S	Sand Grains. **Locatio	on: PL = Pore Lining, M = Matrix	
Hydric Soil		Dopie			ix, mo			0.	
-	stosol (A1)		Sa	ndv Glev	ed Matrix	(S4)	Indicators for Problematic Hydric Soils*: Coast Prairie Redox (A16) (LRR K, L, R)		
	stic Epipedon (A2)			ndy Redo		(01)	Dark Surface (S7) (LRR K, L)		
	ack Histic (A3)			-	atrix (S6)				
	()	4)		••	· · /		Iron-Manganese Masses (F12) (LRR K, L, R) Very Shallow Dark Surface (TF12)		
	drogen Sulfide (A	,		•	ky Minera ′ed Matrix	. ,		, ,	
	atified Layers (A5)		• •		. (Г∠)	X Other (explain in	icilialits)	
	m Muck (A10)	C			atrix (F3)				
	pleted Below Darl		· · · —		Surface	. ,			
	ick Dark Surface (,			ark Surfac		, , ,	dicators of hydrophytic vegetation and wetland	
	ndy Mucky Minera			dox Depr	essions (F8)	hydrology must be pr problematic	esent, unless disturbed or	
5 c	m Mucky Peat or	Peat (S	3)				problematic		
Restrictive La	ayer (if observed):							
Туре:					_		Hydric Soil Presen	t? Yes	
Depth (inches	s):								
Domorkov									
Remarks:									
A12 Assume	d								
ATZ ASSUME	u								
HYDROLO	GY								
	rology Indicators								
-	ators (minimum of		equired: check a	ll that an	nlv)		Secondary Indica	tors (minimum of two required)	
		0110 13 1				12)		· · · · ·	
	e Water (A1)				Fauna (B			Soil Cracks (B6)	
High Water Table (A2)					uatic Plar	• •	Drainage Patterns (B10)		
Saturation (A3)					en Sulfide				
Water Marks (B1)				Oxidized Rhizospheres on Living Crayfish Burrows (C8)					
	ent Deposits (B2) eposits (B3)		Roots (C3) Saturation Visible on Aerial Image						
Algal M		Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)							
Iron De		Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) (C6) FAC-Neutral Test (D5)							
	neny (B7)		ick Surfac						
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9)									
Water-Stained Leaves (B9) Other (Explain in Remarks)									
	`	,				Komarka	<i>''</i>		
Field Observ		V	K I -	v	Denti (o o b '			
Surface Wate		Yes	No No	X X	Depth (in	· _		tland Hydrology	
Water Table F Saturation Pre		Yes Yes	No No	X X	Depth (in Depth (in			Present? No	
		162		^		iciica).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Describe Neb		yauyt		, uonai p		eviduo III			
Remarks:									







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Feature ID: NWB070

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review TETRA TECH


Project/Site:		LAND DETEI		ON DAT	A FORM - Martir	Midwest Region n Sampling Date: 10/24/2022
Applicant/Owner:	Lake C	Lake Charlotte S			State:	MN Sampling Point: NWB071A
Investigator(s):		Susan Mayer		Sect	on, Township	
Landform (hillslope, ter	rrace. etc.):	Plai	n			ve, convex, none): None
Slope (%): 0	Lat:	43.72789		Long:	-94.438	· · · · · · · · · · · · · · · · · · ·
Soil Map Unit Name:		Glencoe complex		· -		I Classification: NA
Are climatic/hydrologic				-		If no, explain in remarks)
		, or hydrology		-	/ disturbed?	Are "normal circumstances present? No
Are vegetation	, soil	, or hydrology		naturally pr		(If needed, explain any answers in remark
SUMMARY OF FI						
Hydrophytic Vege	etation Presen	t? No				
Hydric Soil Prese	nt?	No		Is the s	ampled area	a within a wetland? No
Wetland Hydrolog	gy Present?	No		lf yes, o	ptional wetla	nd site ID:
Remarks:						
VEGETATION L	Jse scientif	ic names of pl	ants.			
			Absolute	Dominant	Indicator	Dominance Test Worksheet
Tree Stratum 1.	(Plot size:	30)	% Cover	Species	Status	Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3						Total Number of Dominant Species Across All Strata: 1 (B)
4 5.						Percent of Dominant Species that are OBL, FACW, or FAC: 0% (A/B)
				=Total Cove	er	
Sapling/Shrub Stratur	<u>n</u> (Plot size:	15)				Prevalence Index Worksheet
1						Total % Cover of: Multiply by:
2						OBL species 0 x 1 = 0
3						FACW species $0 \times 2 = 0$
4						FAC species 0 $x = 0$ FACU species 0 $x = 0$
5				=Total Cov	⊃r	$\begin{array}{c c} \hline & & \\ \hline & & \\ \hline \\ \hline$
Herb Stratum	(Plot size:	5)		-10101 0000		Column totals 50 (A) 250 (B)
1. Zea mays	(,	50	Y	UPL	Prevalence Index = $B/A = 5$
2.						
3.						Hydrophytic Vegetation Indicators:
1						Rapid test for hydrophytic vegetation
5						Dominance test is >50%
6						Prevalence index is ≤3.0*
7						Morphological adaptations* (provide
8						supporting data in Remarks or on a
						separate sheet)
10			50	Total Ora	~	Problematic hydrophytic vegetation*
Woody Vine Stratum	(Plot size:	′		=Total Cov	ei	(explain) *Indicators of hydric soil and wetland hydrology must present, unless disturbed or problematic
2				=Total Cove	er	Hydrophytic Vegetation Present? <u>No</u>
Remarks: (Include pho Agricultural field. Bare		ere or on a separa	ate sheet)			

NWB071A

Depth	Matrix		Re	dox Feat	ures						
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Text	ture	Remarks		
0-20	10YR 2/1	100		70	1990	200		Loam	rtomanto		
							-				
20-35	10YR 3/1	100					Cl	ay			
35-40	2.5Y 4/1	100					Cl	ay			
		ł – –									
*Type: C -	Concentration, D	– Dopla	tion RM – Redu	l Iced Mati	iv MS –	Maskad 9	Sand Grains	**Locati	on: PL = Pore Lining, M = Matrix		
Hydric Soil		- Depie			IX, IVIO –	INId3Keu V			ematic Hydric Soils*:		
•	stosol (A1)		Sa	adv Glav	ed Matrix	(\$4)			dox (A16) (LRR K, L, R)		
						(34)					
	stic Epipedon (A2)			ndy Redo					7) (LRR K, L)		
	ack Histic (A3)		ipped Ma	. ,			-	Masses (F12) (LRR K, L, R)			
	drogen Sulfide (A		-	ky Minera				rk Surface (TF12)			
	atified Layers (A5)			ed Matrix	(F2)	Othe	er (explain in	remarks)		
	cm Muck (A10)				atrix (F3)						
	pleted Below Darl		· · · —		Surface	. ,					
Th	ick Dark Surface (De	pleted Da	ark Surfac	ce (F7)	*Indicator	rs of hydrop	hytic vegetation and wetland			
Sa	Sandy Mucky Mineral (S1)				essions ((F8)			esent, unless disturbed or		
5 c	m Mucky Peat or	Peat (S	3)				problematic				
Restrictive L	aver (if observed	Ŋ-									
Гуре:		·)·					Hydric	Soil Preser	nt? No		
					- -		Hydric	Soil Preser	nt? <u>No</u>		
Type: Depth (inches							Hydric	Soil Preser	nt? <u>No</u>		
Type: Depth (inches	s): 						Hydric	Soil Preser	nt? <u>No</u>		
Type: Depth (inches Remarks: HYDROLO	s): 						Hydric	Soil Preser	nt? <u>No</u>		
Type: Depth (inches Remarks: HYDROLO Wetland Hyd	s): GY		equired; check a	Il that ap					nt? <u>No</u>		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica	GY rology Indicators		required; check a		<u>ply)</u> Fauna (B	313)		ondary Indica	ators (minimum of two required)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac	GY rology Indicators ators (minimum of e Water (A1)		equired; check a	Aquatic	Fauna (B	,		ondary Indica	ators (minimum of two required) Soil Cracks (B6)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2)		equired; check a	Aquatic True Aq	Fauna (B uatic Plar	nts (B14)	Secc	ondary Indica Surface	<u>ators (minimum of two required)</u> Soil Cracks (B6) e Patterns (B10)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)		equired; check a	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	<u>Secc</u> 1)	ondary Indica Surface Drainag	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac Under Satura Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		equired; check a	Aquatic True Aq Hydroge Oxidized	Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14)	<u>Secc</u> 1)	ondary Indica Surface Drainag Dry-Sea Crayfish	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac Under Satura Water Sedima	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (0	Fauna (B uatic Plar en Sulfide d Rhizosp C3)	nts (B14) Odor (C oheres on	Secc - 1) Living	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatio	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (CS		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac Unifac Satura Satura Satura Control	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presenc	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu	nts (B14) Odor (C oheres on uced Iron	Secc - 1) Living	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatio Stunted	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (CS or Stressed Plants (D1)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura Satura Satura Confit Di Algal N	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presenc	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu	nts (B14) Odor (C oheres on uced Iron	<u>Secc</u> - 1) Living (C4)	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatio Stunted Geomor	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (CS		
Type: Depth (inches Remarks: Attraction of the section of th	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)	s: one is I		Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6)	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu	nts (B14) Odor (C oheres on uced Iron uction in T	<u>Secc</u> - 1) Living (C4)	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatio Stunted Geomor	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2)		
Type: Depth (inchess Remarks: APPROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedima Drift Da Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	s: one is r	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu	Fauna (B uatic Plar en Sulfide d Rhizosp d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	<u>Secc</u> - 1) Living (C4)	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatio Stunted Geomor	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac Surfac High W Satura Water Sedima Drift Da Algal M Iron Da Inunda Sparse	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae	rial Imag	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C	Fauna (B Fauna (B an Sulfide d Rhizosp C3) ce of Redu Iron Redu ck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Secc 1) Living (C4) iilled Soils	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatio Stunted Geomor	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2)		
Type: Depth (inches Remarks: TYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water-	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E	rial Imag	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C	Fauna (B uatic Plar on Sulfide d Rhizosp 23) ce of Redu Iron Redu ck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Secc 1) Living (C4) iilled Soils	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatio Stunted Geomor	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac Surfac High W Satura Water Sedima Drift Da Algal M Iron Da Inunda Sparse	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations:	rial Imag	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu Iron Redu ck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Secc 1) Living (C4) iilled Soils	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatic Stunted Geomor FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (CS or Stressed Plants (D1) phic Position (D2) utral Test (D5)		
Type: Depth (inches Remarks: TYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present?	rial Imag cave Su 39)	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C	Fauna (B uatic Plar on Sulfide d Rhizosp 23) ce of Redu Iron Redu ck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Secc 1) Living (C4) iilled Soils	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatic Stunted Geomor FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (CS or Stressed Plants (D1) phic Position (D2) utral Test (D5)		
Type: Depth (inches Remarks: TYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Drift D Algal M Iron De Inunda Sparse Water- Sield Observ Surface Wate	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39)	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches):	Secc 1) Living (C4) iilled Soils	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatic Stunted Geomor FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (CS or Stressed Plants (D1) phic Position (D2) utral Test (D5)		
Type: Depth (inches Remarks: TYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Sedime Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Vater Table F	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge C Other (E X X	Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (ii Depth (ii	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches):	Secc 1) Living (C4) iilled Soils	ondary Indica Surface Drainag Dry-Sea Crayfish Saturatic Stunted Geomor FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2) utral Test (D5)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedima Drift Da Satura Magal M Iron De Inunda Sparse Water- Sield Observ Surface Wate Vater Table F Saturation Pro includes cap	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	<u>Secc</u> 1) - Living - (C4) - illed Soils -)	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatie Stunted Geomor FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2) utral Test (D5)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedima Drift Da Satura Magal M Iron De Inunda Sparse Water- Sield Observ Surface Wate Vater Table F Saturation Pro includes cap	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? essent? essent? ellary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	<u>Secc</u> 1) - Living - (C4) - illed Soils -)	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatie Stunted Geomor FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) Ison Water Table (C2) I Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2) utral Test (D5)		
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Sedima Drift Da Satura Magal M Iron De Inunda Sparse Water- Sield Observ Surface Wate Vater Table F Saturation Pro includes cap	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? essent? essent? ellary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	<u>Secc</u> 1) - Living - (C4) - illed Soils -)	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatie Stunted Geomor FAC-Ne	ators (minimum of two required Soil Cracks (B6) e Patterns (B10) ison Water Table (C2) i Burrows (C8) on Visible on Aerial Imagery (C or Stressed Plants (D1) phic Position (D2) utral Test (D5)		











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Feature ID: NWB071

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	t Regio	n	
Project/Site:	Lake C	harlotte	City/	County:	Marti	n	Sampling	Date:	10/24/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	NWB074A
Investigator(s):		Susan Mayer		Sectio	on, Townshi	p, Range:		Sec.16 T	103N R30W
Landform (hillslope, terrac	;e, etc.):	Plair	า	Local r	elief (conca	ve, conve	, none):		None
Slope (%): 0	Lat:	43.71828		Long:	-94.44	16	Datum:		WGS84
Soil Map Unit Name:	Canisteo-	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		PEM1Af
Are climatic/hydrologic co	nditions of	the site typical for	this time c	of the year?	Yes (lf no, expl	ain in rema	ırks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	cumstance	s present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, exp	lain any a	nswers in remarks.)
SUMMARY OF FIND	DINGS								
Hydrophytic Vegetati	ion Presen	t? No							
Hydric Soil Present?		No		Is the sa	mpled area	a within a	wetland?		No
Wetland Hydrology F	vresent?	No		lf yes, op	tional wetla	nd site ID:			
Remarks:									
Recently tilled agricultur		-	-	ral field.					
VEGETATION Use	e scientif	•		Dominant	Indicator	Domi		Warkaha	at
Tree Stratum (P	lot size:)		Dominant Species	Status	Domin	lance res	t Workshe	el
1.		/		opecies	Olalus			ant Species	a (A)
2								W, or FAC	(//)
3							lumber of D s Across A		(B)
4 5								ant Species W, or FAC	
				=Total Cove	r		,	,	` ` `
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Ind	ex Worksh	eet
1						Total	% Cover o	f:	Multiply by:
2						OBL	species	x 1	=
3							v species		2 =
4							species		3 =
5				T () O			species		! =
List Orestore		, -		=Total Cove	r		species	x 5	
Herb Stratum	(Plot size:)					nn totals		A)(B)
1 2						Pieva	lence Inde	X = D/A =	
3.						Hydro	onhytic Ve	detation l	ndicators:
4.						-		-	hytic vegetation
5.								e test is >5	
6							Prevalence	e index is ≤	3.0*
7.							Morpholog	ical adapta	ations* (provide
8							supporting	data in Re	emarks or on a
9							separate s		
10							Problemat	ic hydroph	vtic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.)						soil and wet Irbed or prot	land hydrology must be plematic
2				=Total Cove	r	Veç	drophytic jetation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWB074A

Dopui	Depth <u>Matrix</u>				tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Text	ure	Remarks
0-17	10YR 2/1	100					Cla	iy	
17-23	10YR 2/1	50					Cla	N/	
11-23							010	,y	
	2.5Y 4/2	50							Mixed Matrix
23-30	2.5Y 5/2	100					Cla	ıy	
* T								++1	- Di Dina Linin a Mart
	Concentration, D	= Deple	tion, RM = Red	uced Mat	rix, MS =	Masked			n: PL = Pore Lining, M = Mat
-	Indicators:		6.		ad Matrix	(64)			matic Hydric Soils*:
	stosol (A1)				ed Matrix	(54)			dox (A16) (LRR K, L, R)
	stic Epipedon (A2) ack Histic (A3)			indy Red					() (LRR K, L)
			atrix (S6)			-	Masses (F12) (LRR K, L, R)		
Hy Str		•	ky Minera ved Matrix	. ,			rk Surface (TF12)		
			atrix (F3)	(FZ)		r (explain in	remaiks)		
	rm Muck (A10) pleted Below Darl	<pre>c Surfac</pre>		•	x Surface	(E6)			
	-	• • —		ark Surface	. ,				
	Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)				ressions (```			ytic vegetation and wetland
					165510115 (FO)	hydrology must be present, unless disturbed or problematic		
			3)			1			
	ayer (if observed	l):							
/pe:					_		Hydric	Soil Presen	t? No
							-		
emarks:					<u>-</u>				
emarks:	GY				-				
emarks: YDROLO	GY rology Indicators								
emarks: YDROLO /etland Hyd rimary Indica	GY rology Indicators ators (minimum of		equired; check a					ndary Indica	tors (minimum of two require
emarks: YDROLO etland Hyd rimary Indica Surface	GY rology Indicators ators (minimum of e Water (A1)		equired; check a	Aquatic	Fauna (B			ndary Indica	Soil Cracks (B6)
emarks: YDROLO /etland Hyd rimary Indica Surface High W	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2)		equired; check a	Aquatic	Fauna (B quatic Plar	nts (B14)	<u>Seco</u>	ndary Indica Surface	Soil Cracks (B6) Patterns (B10)
emarks: YDROLO (etland Hyd rimary Indica Surfaca High W Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)		equired; check a	Aquatic True Ac Hydrog	Fauna (B quatic Plar en Sulfide	nts (B14) Odor (C	<u>Seco</u> - 1)	ndary Indica Surface = Drainage Dry-Seas	Soil Cracks (B6) Patterns (B10) son Water Table (C2)
emarks: YDROLO etland Hyd rimary Indica Surface High W Satura Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		equired; check a	Aquatic True Ac Hydrog Oxidize	Fauna (B quatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	<u>Seco</u> - 1)	ndary Indica Surface 5 Drainage Dry-Seas Crayfish	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
emarks: YDROLO etland Hyd imary Indica Surface High W Satura Water Sedime	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; check a	Aquatic True Ac Hydrog Oxidize Roots (Fauna (B quatic Plar en Sulfide d Rhizosp C3)	nts (B14) Odor (C oheres on	<u>Seco</u> - 1) - Living -	ndary Indica Surface Surface S	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (
emarks: YDROLO etland Hyd imary Indica Surface High W Saturae Water Sedime Drift De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; check a	Aquatic True Ac Hydrog Oxidize Roots (Present	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron	Seco 	ndary Indica Surface Surface S	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (or Stressed Plants (D1)
emarks: YDROLOG etland Hyd rimary Indica Surface High W Satura Water Water Sedime Drift De Algal M	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; check a	Aquatic True Ac Hydrog Oxidize Roots (Present	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron	<u>Seco</u> - 1) - Living -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted Geomorg	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (
emarks: YDROLOG etland Hyd rimary Indica Surface High W Satura' Water Water Sedime Algal M Iron De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)	one is r		Aquatic True Ac Hydrog Oxidize Roots (Present Recent (C6)	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron uction in T	Seco 	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted Geomorg	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (or Stressed Plants (D1) ohic Position (D2)
emarks: YDROLO etland Hyd imary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	<u>one is r</u> rial Imag	 gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Seco 	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted Geomorg	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (for Stressed Plants (D1) ohic Position (D2)
emarks: YDROLO etland Hyd imary Indica Surfaca High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae	one is r rial Imag cave Su	 gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu Gauge	Fauna (B quatic Plar en Sulfide d Rhizosp C3) C3 Ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted Geomorg	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (or Stressed Plants (D1) ohic Position (D2)
emarks: YDROLOG Vetland Hyd rimary Indica Surface High W Satura Water Sedime Algal M Iron De Inunda Sparse Water-	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (B	one is r rial Imag cave Su	 gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu Gauge	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted Geomorg	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (or Stressed Plants (D1) ohic Position (D2)
emarks: YDROLOG Vetland Hyd rimary Indica Surface High W Satura Water Sedime Algal M Iron De Inunda Sparse Water- ield Observ	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations:	one is r rial Imag cave Su	 gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu Gauge	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted G Geomorp FAC-Net	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (for Stressed Plants (D1) ohic Position (D2) utral Test (D5)
emarks: YDROLOO Vetland Hyd rimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- eld Observ urface Wate	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present?	one is r rial Imag cave Su 39)	gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Presend (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): _	Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted G Geomorp FAC-Net	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology
emarks: YDROLOO Vetland Hyd rimary Indica Surface High W Saturat Water Orift De Drift De Algal M Iron De Inunda Sparse Water- vater Vater Table F aturation Pre	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes	gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Presend (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plar en Sulfide d Rhizosp C3) Cc of Redu Iron Redu uck Surfac or Well Da Explain in	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches):	Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted G Geomorp FAC-Net	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (for Stressed Plants (D1) ohic Position (D2) utral Test (D5)
rimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes	gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu Gauge Other (I X X	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches):	Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatic Stunted G Geomorp FAC-Net	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (for Stressed Plants (D1) ohic Position (D2) utral Test (D5)
emarks: PYDROLO /etland Hyd rimary Indica Surface High W Saturat Water Sedime Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre- ncludes capi	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (f Present (C6) Thin Mu Gauge Other (I X X X	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	<u>Seco</u> - - - - - - - - - - - - - - - - - - -	ndary Indica Surface 3 Drainage Dry-Seas Crayfish Saturatic Stunted 0 Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?
emarks: YDROLO etland Hyd imary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- eld Observ urface Wate aturation Pre- actudes capi	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (f Present (C6) Thin Mu Gauge Other (I X X X	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii	nts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	<u>Seco</u> - - - - - - - - - - - - - - - - - - -	ndary Indica Surface 3 Drainage Dry-Seas Crayfish Saturatic Stunted 0 Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (for Stressed Plants (D1) ohic Position (D2) utral Test (D5)













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Feature ID: NWB074

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WETL	AND DETER	MINATI	ION DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Cha	arlotte	City/	County:	Marti	n	Sampling D	ate: 10/2	24/2022
Applicant/Owner:	L	Lake Charlotte So	olar, LLC		State:	MN	Sampling P	oint: NW	/B075A
Investigator(s):	5	Susan Mayer		Sectio	on, Townshi	p, Range:		Sec.16 T103N F	R30W
Landform (hillslope, terrae	ce, etc.):	Plair	า	Local re	elief (conca	ve, conve>	k, none):	Non	е
Slope (%): 1	Lat:	43.71894		Long:	-94.443	383	Datum:	WGS	84
Soil Map Unit Name:	Canisteo-G	lencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA	
Are climatic/hydrologic co	nditions of th	ne site typical for	this time c	of the year?	Yes (lf no, expl	ain in remark	(S)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	mstances prese	nt? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, expla	in any answers	in remarks.)
SUMMARY OF FINI	DINGS								
Hydrophytic Vegetat	ion Present?	P No							
Hydric Soil Present?	j	Yes		Is the sa	ampled area	a within a	wetland?	No	
Wetland Hydrology I	Present?	No		lf yes, op	otional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultu		-	-	al field.					
				Dominant	Indicator	Domi	nance Test \	Norksheet	
Tree Stratum (F	Plot size:)		Species	Status				
1.		/					er of Dominan e OBL, FACW) (A)
2.							Number of Do	·	
3 4							es Across All S) (B)
4 5							nt of Dominan e OBL, FACW		6 (A/B)
		_		=Total Cove	r				
Sapling/Shrub Stratum	(Plot size:)						Worksheet	
1						_	% Cover of:	Multipl	y by:
								x 1 =	
3 4.							V species species	x 2 =	
4 5.							J species	x 3 = x 4 =	
0				=Total Cove	r		species	x 5 =	
Herb Stratum	(Plot size:) –					nn totals	(A)	(B)
1.	` -	/					lence Index	```	()
2.									
3.						Hydro	ophytic Veg	etation Indicato	ors:
4.							Rapid test fo	or hydrophytic ve	egetation
5							Dominance	test is >50%	
6								ndex is ≤3.0*	
7								al adaptations*	
8								ata in Remarks	or on a
9							separate she	,	- 4 - 4 *
10				Total Caus				hydrophytic veg	etation
Woody Vine Stratum 1.	(Plot size:)		=Total Cove	I	*Indicate		oil and wetland hyd oed or problematic	
2				=Total Cove	r	Veç	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo Recently tilled agricultura						-		<u>No</u>	

NWB075A

Depth	Matrix		<u> </u>	Redox Fea	atures					
(Inches)	Color (moist)	%	Color (moist) %	Type*	Loc**	Text	ure	Remarks	
0-20	10YR 2/1	100					Cla	ay		
20-40	10YR 3/1	100					Cla			
20-40	10113/1	100					Cic	ıy		
*Type: C =	Concentration, D	= Deple	tion, RM = Re	duced Ma	trix, MS =	Masked S	Sand Grains.	**Locatio	on: PL = Pore Lining, M = Ma	
Hydric Soil	Indicators:						Indicators	s for Proble	ematic Hydric Soils*:	
His	stosol (A1)		5	andy Gle	yed Matrix	(S4)	Coas	t Prairie Re	dox (A16) (LRR K, L, R)	
His	stic Epipedon (A2)		andy Red	dox (S5)	Dark Surface (S7) (LRR K, L)				
Bla	Black Histic (A3) Hydrogen Sulfide (A4)			Stripped N	latrix (S6)		Iron-I	Manganese	Masses (F12) (LRR K, L, R)	
Hy				.oamy Mu	cky Minera	al (F1)	Very	Shallow Da	rk Surface (TF12)	
Str	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)				yed Matrix	(F2)	X Othe	r (explain in	remarks)	
2 0					Aatrix (F3)					
De					k Surface	(F6)				
Th					Dark Surfac	ce (F7)	*Indicator	e of hydroph	nytic vegetation and wetland	
					oressions (. ,		, ,	esent, unless disturbed or	
					(,	problema			
	-		,			1				
estrictive L	ayer (if observed	1):								
		,					l la calacia d			
ype: epth (inches					_		Hydric	Soil Presen	t? Yes	
ype: pepth (inches emarks:							Hydric \$	Soil Presen	nt? Yes	
epth (inches	s):	, 			_		Hydric \$	Soil Presen	t? <u>Yes</u>	
epth (inches	d	, 					Hydric S	Soil Presen	nt? <u>Yes</u>	
epth (inches emarks: 12 Assume IYDROLO	d				_ 		Hydric S	Soil Presen	t? <u>Yes</u>	
Vepth (inches Remarks: A12 Assume IYDROLO Vetland Hyd	d GY	5:	equired; checl	all that a					tt? Yes	
epth (inches emarks: A12 Assume IYDROLO /etland Hyd rimary Indica	d GY Irology Indicator:	5:	equired; checl		<u></u> 	313)		ndary Indica		
epth (inches emarks: A12 Assume IYDROLO Vetland Hyd rimary Indica Surfac	d GY irology Indicators ators (minimum of	5:	equired; checl	Aquati				ndary Indica	ators (minimum of two require	
epth (inches emarks: 12 Assume IYDROLO /etland Hyd rimary Indica Surfac High W	d GY Irology Indicator: ators (minimum of e Water (A1)	5:	equired; checl	Aquati True A	c Fauna (B	nts (B14)	<u>Seco</u>	ndary Indica Surface	ators (minimum of two require Soil Cracks (B6)	
epth (inches emarks: A12 Assume IYDROLO /etland Hyd rimary Indica Surfac High W Satura	d GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)	5:	equired; checl	Aquati True A Hydrog	c Fauna (B quatic Plai	nts (B14) Odor (C	<u>Seco</u> - 1) _	ndary Indica Surface Drainage Dry-Sea	ators (minimum of two require Soil Cracks (B6) e Patterns (B10)	
Pepth (inches Remarks: A12 Assume IYDROLO Vetland Hyd Vetland Hyd Saurfac High W Satura Water	d GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)	5:	equired; checl	Aquati True A Hydrog	c Fauna (B quatic Plai gen Sulfide ed Rhizosp	nts (B14) Odor (C	<u>Seco</u> - 1) _	ndary Indica Surface Drainage Dry-Sea Crayfish	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2)	
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Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWB075

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Regior	1	
Project/Site:	Lake Cl	narlotte	City/	County:	Marti	n	Sampling	Date:	10/24/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling I	Point:	NWB076A
Investigator(s):		Susan Mayer		Sectio	on, Townshi	p, Range:		Sec.16 T	103N R30W
Landform (hillslope, terrac	e, etc.):	Depress	sion	Local re	elief (conca	/e, convex	k, none):		Concave
Slope (%): 2	Lat:	43.71813		Long:	-94.443	82	Datum:		WGS84
Soil Map Unit Name:	Canisteo-0	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA
Are climatic/hydrologic cor	nditions of t	the site typical for	this time c	of the year?	Yes (lf no, expla	ain in rema	rks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expl	ain any ar	nswers in remarks.)
SUMMARY OF FIND	NGS								
Hydrophytic Vegetati	on Present	? No							
Hydric Soil Present?		Yes		Is the sa	mpled area	a within a	wetland?		No
Wetland Hydrology F	'resent?	No		lf yes, op	tional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultur			0	al field.					
VEGETATION Use	e scientifi	•		<u> </u>		·			
Troc Stratum (D		``		Dominant	Indicator	Domi	nance Test	worksnee	et
Tree Stratum (Pl	lot size:)	% Cover	Species	Status		er of Domina		0 (4)
2						that are	e OBL, FAC	W, or FAC:	(A)
3.							lumber of Des Across All		(B)
4							nt of Domina		
5				=Total Cover		that are	e OBL, FAC	W, or FAC:	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:) -				Prova	lence Inde	v Worksh	eet
<u>Saping/Sinds Stratum</u> 1.	(1 101 3126.)					% Cover of		Multiply by:
2							species	x 1	
3.							V species	x 2	
4.						FAC s	species	x 3	=
5.						FACU	l species		=
				=Total Cover	r	UPL s	species	x 5	=
Herb Stratum	(Plot size:)				Colum	nn totals	(A) <u>(B)</u>
1						Preva	lence Index	(= B/A =	
2									
3						-	ophytic Ve	-	
4						_		• •	nytic vegetation
5 6							Dominance Prevalence		
7						_			tions* (provide
8.									marks or on a
9.							separate sl		
10.							Problemati	c hydrophy	tic vegetation*
				=Total Cover	r		(explain)		
Woody Vine Stratum 1.)					ors of hydric s unless distu		and hydrology must be lematic
2		-		=Total Cover	r	Veg	drophytic getation sent?	No	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWB076A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10YR 2/1	100					Clay	
8-40	2.5Y 5/1	100					Clay	
±= 0								
, ,	Concentration, D	= Deple	etion, RM = Redu	iced Mati	rix, MS =	Masked		on: PL = Pore Lining, M = Matrix
Hydric Soil	stosol (A1)		Sa	adv Glov	ed Matrix	(\$4)		ematic Hydric Soils*: dox (A16) (LRR K, L, R)
				ndy Redo		(34)	Dark Surface (S	
	stic Epipedon (A2) ack Histic (A3)			ipped Ma				Masses (F12) (LRR K, L, R)
	drogen Sulfide (A3)	4)		• •	ky Minera			rk Surface (TF12)
	arogen Suilide (A	,		•	ky ivilnera ved Matrix	. ,	Other (explain in	
	m Muck (A10))			atrix (F3)	(Г2)		Temarks)
	pleted Below Darl	c Surfac			Surface	(F6)		
	ick Dark Surface (· · ·		ark Surface	. ,		
	ndy Mucky Minera	. ,			essions (nytic vegetation and wetland esent, unless disturbed or
	m Mucky Peat or			uox Depi	65510115 (-0)	problematic	esent, unless disturbed of
	-		5)			1		
	ayer (if observed	l):					Ubadaia Osil Dassa	
Type: Depth (inches	· · ·				-		Hydric Soil Preser	it? Yes
Depth (menes	·/·				-			
HYDROLO								
•	rology Indicators							
	ators (minimum of	one is r	equired; check a				-	ators (minimum of two required)
	e Water (A1)				Fauna (B	,		Soil Cracks (B6)
	/ater Table (A2)			. '	uatic Plar	```	0	e Patterns (B10)
	tion (A3)				en Sulfide			son Water Table (C2)
	Marks (B1)				d Rhizosp	heres on	<u> </u>	Burrows (C8)
	ent Deposits (B2)			Roots (C		upped Iron		on Visible on Aerial Imagery (C9)
	eposits (B3) /at or Crust (B4)			•	e of Redu Iron Redu		· · ·	or Stressed Plants (D1) phic Position (D2)
0	eposits (B5)			(C6)	non Reut			utral Test (D5)
	tion Visible on Ae	rial Ima	nerv (B7)	• • • •	ick Surfac	e (C7)		
	ly Vegetated Con				or Well Da			
	Stained Leaves (E		. ,	-	Explain in		3)	
Field Observ	```				•		·	
Surface Wate		Yes	No	Х	Depth (ii	nches):		
Water Table F		Yes	No	Х	Depth (ii		We	etland Hydrology Present2
Saturation Pre	esent?	Yes	No	Х	Depth (ii	nches):		Present? No
(includes capi	llary fringe)							
Describe Rec	orded Data (strea	m gauge	e, monitoring wel	l, aerial p	photos, pr	evious in	spections), if available:	
<u> </u>								
Remarks:								





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake C	harlotte	City/	County:	Marti	n	Sampling Da	ate:	0/24/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling Po	pint:	NWB077A
Investigator(s):		Susan Mayer		Sectio	on, Townshij	p, Range:		Sec.16 T103	N R30W
Landform (hillslope, terrac	;e, etc.):	Plair	า	Local re	elief (concav	ve, conve	k, none):	N	lone
Slope (%): 0	Lat:	43.71778		Long:	-94.444	44	Datum:	W	GS84
Soil Map Unit Name:	Canisteo-	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	N	4
Are climatic/hydrologic co	nditions of	the site typical for	this time c	of the year?	Yes (If no, expl	ain in remark	s)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circur	nstances pre	esent? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explai	in any answ	ers in remarks.)
SUMMARY OF FIND	DINGS								
Hydrophytic Vegetati	ion Present	t? No							
Hydric Soil Present?		No		Is the sa	mpled area	a within a	wetland?	No	>
Wetland Hydrology F	resent?	No		lf yes, op	tional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultur		-	0	al field.					
VEGETATION Use	e scientif	•		Dominant	Indiantar	Domi	nanaa Taat V	Verkoheet	
Tree Stratum (P	lot size:)		Dominant Species	Indicator Status	Domi	nance Test V	vorksneet	
1.		/	/0 00001	opecies	Olalus		er of Dominant		0 (A)
2							e OBL, FACW		(//)
3.							Number of Don es Across All S		0 (B)
4							nt of Dominant		0/ (A/D)
5				=Total Cove	r	that ar	e OBL, FACW	, or FAC:	% (A/B)
Sapling/Shrub Stratum	(Plot size:) -				Preva	alence Index	Worksheet	
1.	(/					% Cover of:		tiply by:
2.						OBL	species	x 1 =	
3.						FACV	V species	x 2 =	
4						FAC s	species	x 3 =	
5						FACL	J species	x 4 =	
		-		=Total Cove	r	UPLs	species	x 5 =	
Herb Stratum	(Plot size:)					nn totals	(A)	(B)
1						Preva	lence Index =	= B/A =	
						Lbrahn		tation India	-1
3 4							phytic Vege Rapid test for		
5							Dominance to		vegetation
6							Prevalence in		·
7.							Morphologica	al adaptation	s* (provide
8.							supporting da	ata in Remar	ks or on a
9.							separate she	et)	
10							Problematic I	hydrophytic v	/egetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.)					ors of hydric soi , unless disturbe		hydrology must be atic
2				=Total Cove	r	Veç	drophytic getation esent?	N -	
Remarks: (Include photo r	umbora		to choct					<u>No</u>	
Recently tilled agricultural			ie Sneel)						

NWB077A

Depth	Matrix			Re	dox Fea	tures	<u> </u>]			
(Inches)	Color (moist)	%	Color (me	oist)	%	Type*	Loc**	Textu	re	Remarks	
0-16	10YR 2/1	100						Clay	/		
16-22	2.5Y 2.5/1	100						Clay	/		
22-26	5Y 5/3	90	2.5Y 5/	6	1	С	PL	Sandy (ciay		
	2.5Y 3/1	9								Mixed Matrix	
** 0				<u> </u>							
	Concentration, D	= Deple	etion, RM =	Redu	Iced Mat	rix, MS =	Masked			n: PL = Pore Lining, M = Mat	
Hydric Soil			0.0			Indicators for Problematic Hydric Soils*:					
	stosol (A1)	_	_		ed Matrix	(54)					
	Histic Epipedon (A2) Black Histic (A3)				ndy Red		Dark Surface (S7) (LRR K, L)				
Black Histic (A3) Hydrogen Sulfide (A4)				_	•••	atrix (S6)			-	Masses (F12) (LRR K, L, R)	
Hydrogen Sulfide (A4) Stratified Layers (A5)				_		ky Minera				(Surface (TF12)	
	_			ed Matrix	(F2)	Other	(explain in r	emarks)			
	m Muck (A10)				atrix (F3)						
	pleted Below Dar		_		Surface	. ,					
	_			ark Surfac				tic vegetation and wetland			
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)				_ Re	dox Dep	ressions (F8)	problemati		sent, unless disturbed or	
50	m Mucky Peat or	Peat (S	3)					P	-		
estrictive L	ayer (if observed	d):									
уре:						_		Hydric S	oil Present	? <u>No</u>	
Depth (inches	s):					_					
IYDROLO	GY										
-	rology Indicator										
rimary Indica	ators (minimum of	f one is i	equired; ch	eck a	Il that ap	oply)		<u>Secon</u>	dary Indicate	ors (minimum of two require	
Surfac	e Water (A1)				Aquatic	Fauna (B	313)		Surface S	oil Cracks (B6)	
High W	/ater Table (A2)				True Ac	juatic Plar	nts (B14)		Drainage	Patterns (B10)	
Satura	tion (A3)				Hydroge	en Sulfide	Odor (C	1)	Dry-Sease	on Water Table (C2)	
Water	Marks (B1)				Oxidize	d Rhizosp	heres on	Living	Crayfish E	Burrows (C8)	
	ent Deposits (B2)				Roots (,		_		Visible on Aerial Imagery (
	eposits (B3)					ce of Redu				r Stressed Plants (D1)	
	Mat or Crust (B4)					Iron Redu	iction in	Tilled Soils	_ ·	nic Position (D2)	
	eposits (B5)	rial Ima	non (DZ)		(C6)	al Curfa		—	FAC-Neut	ral Test (D5)	
	tion Visible on Ae					ick Surfac	. ,				
	ely Vegetated Con Stained Leaves (I		mace (bo)		-	or Well Da Explain in					
		B9)					Remarks	>)	-		
ield Observ		Vee		NIa	V	Danth (i					
Surface Wate Vater Table F		Yes		No	X X	Depth (ii			Wet	and Hydrology	
Saturation Pre		Yes Yes		No No	X	Depth (ii Depth (ii	-			Present? No	
includes capi		162		NU	^	<u>- Depui (ii</u>				110	
	orded Data (strea	m aqua	monitorin	a wel		abotos pr	ovious in	epections) if a	wailable:		
	olded Data (Silea	in yauy	s, montorin	y wei	i, aenai j	5110103, pi	evious in	ispections), il a			
Remarks:											

















A1

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Feature ID: NWB077

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- —— Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	RMINATI	ON DATA	FORM -	Midwes	st Regio	า		
Project/Site:	Lake C	harlotte	City/	County:	Marti	n	Sampling	Date:	10/24/2	2022
Applicant/Owner:		Lake Charlotte Se	olar, LLC		State:	MN	Sampling	Point:	NWBC)78A
Investigator(s):		Susan Mayer		Section	on, Townshi	p, Range:		Sec.16 T	103N R30	W
Landform (hillslope, terrace	e, etc.):	Depres	sion	Local r	elief (conca	ve, conve>	k, none):		Concave	
Slope (%): 1	Lat:	43.71829		Long:	-94.44	591	Datum:		WGS84	
Soil Map Unit Name:	Canisteo-	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	F	PEM1Af	
Are climatic/hydrologic cor	nditions of	the site typical for	this time c	of the year?	Yes	(If no, expl	ain in rema	rks)		
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	present?	No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, exp	lain any a	nswers in	remarks.)
SUMMARY OF FIND	INGS									
Hydrophytic Vegetation	on Presen	t? No								
Hydric Soil Present?		No		Is the sa	mpled are	a within a	wetland?		No	
Wetland Hydrology P	resent?	No		If yes, op	otional wetla	and site ID:	:			_
Remarks:										
Recently tilled agricultura			0	al field.						
VEGETATION Use	scientif			Dominant	Indicator	Domi	nance Tes	Warkaha		
Tree Stratum (PI	ot size:)		Dominant Species	Status	Domin	lance res	WORKSHE	el	
1.)		Opecies	Olalus		er of Domina	•	~	(A)
2							e OBL, FAC			_ (//)
3.							lumber of D s Across Al		0	(B)
4 5.							t of Domina			(
J				=Total Cove	r	that ar	e OBL, FAC	W, or FAC:	70	(A/B)
Sapling/Shrub Stratum	(Plot size:					Preva	lence Inde	ex Worksh	eet	
1.	·	,				Total	% Cover of	f:	Multiply b	y:
2.						OBL	species	x 1	=	
3.						FACV	V species	x 2	. =	
4.						FAC s	species		3 =	
5							l species	x 4	· =	
				=Total Cove	r		species	x 5		
Herb Stratum	(Plot size:)					nn totals	(A	·)	(B)
1						Preva	lence Inde	x = B/A =		
2 3.						Hydr	ophytic Ve	actation b	adicators	
3 4							Rapid test	-		
5							Dominance	• •		
6							Prevalence	e index is ≤	3.0*	
7.							Morpholog	ical adapta	itions* (pro	ovide
8.							supporting	data in Re	marks or	on a
9							separate s			
10							Problemati	c hydrophy	/tic vegeta	ation*
				=Total Cove	r		(explain)			
Woody Vine Stratum 1.)					ors of hydric unless distu			ogy must be
2				=Total Cove	r	Veç	drophytic getation sent?	<u>No</u>		
Remarks: (Include photo n Recently tilled agricultural			te sheet)							

NWB078A

Profile Descr	iption: (Describe	e to the	depth need	ed to	o docum	ent the i	ndicator	or confirm the a	bsence c	f indicators.)		
Depth	<u>Matrix</u>			Re	dox Feat	<u>tures</u>						
(Inches)	Color (moist)	%	Color (mo	ist)	%	Type*	Loc**	Texture		Remarks		
0-20	10YR 2/1	100						Clay				
20-25	10YR 2/1	97	10YR 3/2	2	3	D	М	Clay				
25-40	10YR 3/2	85	10YR 4/4	1	15	с	PL	Clay		Distinct or Prominent		
20 40	1011(3/2	00	1011(4/-	r	10	0		City		District of Fromment		
*Turnal C -	Concentration D	– Donla	tion DM - [Dodu	l		Maakad	Cond Croins 1	**L a a a ti a n	· DI - Dara Lining M - Mat		
, ,	Concentration, D	– Depie	elion, ravi – r	teau	iced Mat	11X, 1VIS –	waskeu			: PL = Pore Lining, M = Mat natic Hydric Soils*:		
Hydric Soil	stosol (A1)			Sa	ndv Glev	ed Matrix	(\$4)			bx (A16) (LRR K, L, R)		
	stic Epipedon (A2)			-	ndy Redo		(04)			(LRR K, L)		
	ack Histic (A3)		-	-	atrix (S6)				lasses (F12) (LRR K, L, R)			
	Hydrogen Sulfide (A4) Stratified Layers (A5)					ky Minera) (E1)					
						ved Matrix			kplain in re			
	m Muck (A10)		-		atrix (F3)	· (• <i>∠</i>)			smanoj			
	pleted Below Darl	k Surfac	ο (Δ11)	-		Surface	(F6)					
	ick Dark Surface (<u> </u>	-		ark Surfac	· · /						
			-		ressions (tic vegetation and wetland			
	Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)					163310113 (10)	hydrology must be present, unless disturbed or problematic				
	-		0)									
	ayer (if observed	l):							D	N NI-		
Type: Depth (inches						-		Hydric Soil	Present	? <u>No</u>		
	·					-						
Remarks:												
HYDROLO	-											
-	rology Indicators									, , , .		
	ators (minimum of	one is i	equired; che	eck a						ors (minimum of two required		
	e Water (A1)				-	Fauna (B				oil Cracks (B6)		
0	/ater Table (A2)					uatic Plar	` '		0	Patterns (B10)		
	tion (A3)					en Sulfide	`	,		on Water Table (C2)		
	Marks (B1)					d Rhizosp	heres on		-	Surrows (C8)		
	ent Deposits (B2)				Roots (0	23) ce of Redi	upped Iron			Visible on Aerial Imagery (
	eposits (B3) /at or Crust (B4)				-			. ,		Stressed Plants (D1) Nic Position (D2)		
	eposits (B5)				(C6)	non Reut				ral Test (D5)		
	tion Visible on Ae	rial Ima	nerv (B7)		- ' '	ick Surfac	e (C7)	—'				
	ely Vegetated Con				-	or Well Da	. ,					
	Stained Leaves (E				-	Explain in		3)				
Field Observ	,	- /						, 				
Surface Wate		Yes	1	١o	Х	Depth (ii	nches):					
Water Table F		Yes		No	X	Depth (ii			Wetl	and Hydrology		
Saturation Pre		Yes		No	X	Depth (ii	-			Present? No		
(includes capi						<u> </u>	· _					
Describe Rec	orded Data (strea	m gaug	e, monitoring	, wel	ll, aerial p	photos, pr	evious in	spections), if avai	ilable:			
Remarks:												





1750 2455 2019 Signature: DO

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2013



Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

Signature: NV

2017



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Feature ID: NWB078

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WETL	AND DETER	MINAT	ION DATA	FORM -	Midwes	st Regior	ı		
Project/Site:			City/County: Ma		Martir	tin Samp		Date:	10/24/2022	
Applicant/Owner:	L	_ake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	NWB082A	
Investigator(s):	S	Susan Mayer		Section	on, Township	o, Range:		Sec.16 T	103N R30W	
Landform (hillslope, terrac	e, etc.):	Plair	า	Local r	elief (concav	e, conve	k, none):		None	
Slope (%): 0	Lat:	43.72412		Long:	-94.446	49	Datum:		WGS84	
Soil Map Unit Name:	Crippin loar	n, 1 to 3 percent	slopes		NW	l Classific	ation:		NA	
Are climatic/hydrologic co	nditions of th	e site typical for	this time of	of the year?	Yes (I	f no, expl	ain in rema	rks)		
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	s present? No	
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, exp	lain any ar	nswers in remarks.)	
SUMMARY OF FINE	DINGS	_								
Hydrophytic Vegetati	ion Present?	No								
Hydric Soil Present?		No		Is the sa	ampled area	within a wetland? No			No	
Wetland Hydrology F	Present?	No		lf ves. or	otional wetla	nd site ID:	:			
Remarks:										
Recently tilled agricultur		-	-	al field.						
VEGETATION Use	e scientific	•		Dominant	Indiantar	Domi	nance Test	Warkaha		
Tree Stratum (P	lot size:)		Dominant Species	Indicator Status	Domin		workshe	el	
1		/		Opecies	Olalus		er of Domina e OBL, FAC			
2 3							Number of D s Across Al		(B)	
4 5							nt of Domina e OBL, FAC		% (A/B)	
				=Total Cove	er		,	,	、 、	
Sapling/Shrub Stratum	(Plot size:)				Preva	alence Inde	x Worksh	eet	
1.						Total	% Cover of	•	Multiply by:	
2						OBL	species	x 1	=	
3							V species	x 2	. =	
4							species	x 3		
5				T () O			J species _		=	
Liste Otraction		, -		=Total Cove	er		species	x 5		
Herb Stratum	(Plot size:)					nn totals	(A	(B)	
1 2						Pieva	lence Inde	x = D/A = -		
3.						Hydro	ophytic Ve	aetation lu	dicators	
4.						-		-	hytic vegetation	
5.							Dominance	, ,	, ,	
6							Prevalence	e index is ≤	3.0*	
7.							Morpholog	ical adapta	tions* (provide	
8.							supporting	data in Re	marks or on a	
9							separate s	heet)		
10							Problemati	c hydrophy	/tic vegetation*	
				=Total Cove	er		(explain)			
Woody Vine Stratum 1.	(Plot size:)					ors of hydric unless distu		and hydrology must be Iematic	
2				=Total Cove	er	Veç	drophytic getation sent?	<u>No</u>		
Remarks: (Include photo r Recently tilled agricultural			te sheet)							

NWB082A

Depth (Inches) Matrix Redox Feature 0-13 10YR 2/1 100 % 0-13 10YR 2/1 100 % 13-15 2.5Y 4/1 100 % 15-20 2.5Y 5/2 100 % *Type: C = Concentration, D = Depletion, RM = Reduced Matrix Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganese Very Shallow D Other (explain i	e Masses (F12) (LRR K, L, R) park Surface (TF12) in remarks) phytic vegetation and wetland present, unless disturbed or			
0-13 10YR 2/1 100	k, MS = d Matrix (S5) rix (S6) y Minera d Matrix trix (F3) Surface ck Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Clay Clay Clay Sand Grains. **Locat Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
15-20 2.5Y 5/2 100 Image: strict	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Clay Clay Clay Sand Grains. **Locat Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
15-20 2.5Y 5/2 100 Image: strict	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Clay Sand Grains. **Locat Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganese Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
*Type: C = Concentration, D = Depletion, RM = Reduced Matrix Histosol (A1)	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Sand Grains. **Locat Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganese Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Hydric Soil Indicators:	d Matrix ((S5) rix (S6) y Minera ed Matrix trix (F3) Surface (rk Surface	(S4) al (F1) a (F2) (F6) ce (F7)	Indicators for Prob Coast Prairie R Dark Surface (S Iron-Manganes Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	bematic Hydric Soils*: ledox (A16) (LRR K, L, R) S7) (LRR K, L) le Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland bresent, unless disturbed or			
Histosol (A1) Sandy Gleyed Histic Epipedon (A2) Sandy Redox Black Histic (A3) Stripped Matr Hydrogen Sulfide (A4) Loamy Mucky Stratified Layers (A5) Loamy Gleyed 2 cm Muck (A10) Depleted Matr Depleted Below Dark Surface (A11) Redox Dark S Thick Dark Surface (A12) Depleted Dark Sandy Mucky Mineral (S1) Redox Depresent 5 cm Mucky Peat or Peat (S3) Strictive Layer (if observed): pe:	k (S5) rix (S6) y Minera d Matrix trix (F3) Surface rk Surfac	ul (F1) (F2) (F6) ce (F7)	Coast Prairie R Dark Surface (S Iron-Manganese Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	edox (A16) (LRR K, L, R) S7) (LRR K, L) e Masses (F12) (LRR K, L, R) bark Surface (TF12) in remarks) phytic vegetation and wetland present, unless disturbed or			
Histic Epipedon (A2) Sandy Redox Black Histic (A3) Stripped Matr Hydrogen Sulfide (A4) Loamy Mucky Stratified Layers (A5) Loamy Gleyer 2 cm Muck (A10) Depleted Matr Depleted Below Dark Surface (A11) Redox Dark S Thick Dark Surface (A12) Depleted Dark Sandy Mucky Mineral (S1) Redox Depres 5 cm Mucky Peat or Peat (S3) Strictive Layer (if observed): pe:	k (S5) rix (S6) y Minera d Matrix trix (F3) Surface rk Surfac	ul (F1) (F2) (F6) ce (F7)	Dark Surface (S Iron-Manganese Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	S7) (LRR K, L) e Masses (F12) (LRR K, L, R) Park Surface (TF12) in remarks) phytic vegetation and wetland present, unless disturbed or			
Black Histic (A3) Stripped Matr Hydrogen Sulfide (A4) Loamy Mucky Stratified Layers (A5) Loamy Gleyer 2 cm Muck (A10) Depleted Matr Depleted Below Dark Surface (A11) Redox Dark S Thick Dark Surface (A12) Depleted Darl Sandy Mucky Mineral (S1) Redox Deprese 5 cm Mucky Peat or Peat (S3) Strictive Layer (if observed): pe:	rix (S6) y Minera ed Matrix trix (F3) Surface k Surface	(F2) (F6) ce (F7)	Iron-Manganese Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	e Masses (F12) (LRR K, L, R) park Surface (TF12) in remarks) phytic vegetation and wetland present, unless disturbed or			
Hydrogen Sulfide (A4) Loamy Mucky Stratified Layers (A5) Loamy Gleyer 2 cm Muck (A10) Depleted Mat Depleted Below Dark Surface (A11) Redox Dark S Thick Dark Surface (A12) Depleted Dar Sandy Mucky Mineral (S1) Redox Depression 5 cm Mucky Peat or Peat (S3) Strictive Layer (if observed): pe:	y Minera ed Matrix trix (F3) Surface k Surfac	(F2) (F6) ce (F7)	Very Shallow D Other (explain i *Indicators of hydrop hydrology must be p problematic	Park Surface (TF12) in remarks) phytic vegetation and wetland present, unless disturbed or			
Stratified Layers (A5) Loamy Gleyer 2 cm Muck (A10) Depleted Mat Depleted Below Dark Surface (A11) Redox Dark S Thick Dark Surface (A12) Depleted Dark Sandy Mucky Mineral (S1) Redox Depression 5 cm Mucky Peat or Peat (S3) Sandy Mucky Peat or Peat (S3) Estrictive Layer (if observed): pe: peth (inches):	ed Matrix trix (F3) Surface rk Surfac	(F2) (F6) ce (F7)	Other (explain i *Indicators of hydrop hydrology must be p problematic	in remarks) phytic vegetation and wetland present, unless disturbed or			
2 cm Muck (A10) Depleted Mat Depleted Below Dark Surface (A11) Redox Dark S Thick Dark Surface (A12) Depleted Dark Sandy Mucky Mineral (S1) Redox Depression 5 cm Mucky Peat or Peat (S3) Strictive Layer (if observed): pe:	trix (F3) Surface k Surfac	(F6) ce (F7)	*Indicators of hydrop hydrology must be p problematic	phytic vegetation and wetland present, unless disturbed or			
Depleted Below Dark Surface (A11) Redox Dark S Thick Dark Surface (A12) Depleted Dark Sandy Mucky Mineral (S1) Redox Depres 5 cm Mucky Peat or Peat (S3) estrictive Layer (if observed): pe: peth (inches):	Surface k Surfac	ce (F7)	hydrology must be p problematic	present, unless disturbed or			
Thick Dark Surface (A12) Depleted Dar Sandy Mucky Mineral (S1) Redox Depres 5 cm Mucky Peat or Peat (S3) estrictive Layer (if observed): pe: pe: peth (inches):	k Surfac	ce (F7)	hydrology must be p problematic	present, unless disturbed or			
Sandy Mucky Mineral (S1) Redox Depres 5 cm Mucky Peat or Peat (S3) estrictive Layer (if observed): pe: peth (inches):			hydrology must be p problematic	present, unless disturbed or			
5 cm Mucky Peat or Peat (S3) estrictive Layer (if observed): pe: epth (inches):	essions (F8)	problematic				
pe:				ent? <u>No</u>			
/pe:epth (inches):			Hydric Soil Prese	ent? <u>No</u>			
epth (inches):			Hydric Soil Prese	ent? No			
emarks:							
IYDROLOGY							
etland Hydrology Indicators:							
rimary Indicators (minimum of one is required; check all that appl				cators (minimum of two require			
Surface Water (A1) Aquatic F				Surface Soil Cracks (B6)			
High Water Table (A2)		` '	`	Drainage Patterns (B10)			
Saturation (A3) Hydrogen		•	· ·	Dry-Season Water Table (C2)			
Water Marks (B1) Oxidized		heres on	<u> </u>	Crayfish Burrows (C8)			
Sediment Deposits (B2)Roots (C3				Saturation Visible on Aerial Imagery (C Stunted or Stressed Plants (D1)			
Drift Deposits (B3) Presence			· · ·				
Algal Mat or Crust (B4) Recent Iro Iron Deposits (B5) (C6)	JII Keuu			eutral Test (D5)			
Inundation Visible on Aerial Imagery (B7) Thin Mucl	k Surfac	·e (C7)					
Sparsely Vegetated Concave Surface (B8) Gauge or		. ,					
Water-Stained Leaves (B9) Other (Ex			;)				
	-p.a		·				
ield Observations: urface Water Present? Yes No X [Depth (ir	nches).					
	Depth (ir	·	w	etland Hydrology			
	Depth (ir			Present? No			
ncludes capillary fringe)							
escribe Recorded Data (stream gauge, monitoring well, aerial ph	notos. pr	evious in:	spections), if available:				
	,1		,				
emarks:							







80 120 160 200 40 Ω







Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500



Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



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Aerial Photograph Review

Project/Site:	WETI Lake Ch			NATION DATA FORM - N City/County: Martin			st Region Sampling Dat	e: 10/25/2022
Applicant/Owner:		Lake Charlotte Sol	_ ·		State:	MN	Sampling Poin	
Investigator(s):		Susan Mayer		Sect	ion, Townsh	ip, Range:		ec.21 T103N R30W
Landform (hillslope, terra	ace, etc.):	Plain			relief (conca			None
Slope (%): 1		43.7164		Long:	-94.43		Datum:	WGS84
Soil Map Unit Name:	Canisteo-G	ilencoe complex, () to 2 per	cent slopes	NV	VI Classifica	ation:	NA
Are climatic/hydrologic c		-		-			ain in remarks)
		, or hydrology		-	y disturbed?			stances present? No
Are vegetation	, soil	, or hydrology		-	oblematic?		eded, explain	any answers in remarks.)
SUMMARY OF FIN						·	•	
Hydrophytic Vegeta	ation Present?	? No						
Hydric Soil Present	!?	Yes		Is the s	ampled are	a within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes, o	optional wetl	and site ID:	·	
Remarks:								
Recently harvested a	gricultural fiel	d.						
VEGETATION Us	se scientific	names of pla	nts.					
				Dominant	Indicator	Domir	nance Test W	orksheet
Tree Stratum (Plot size:)	% Cover	Species	Status		er of Dominant S e OBL, FACW,	
3							lumber of Domi s Across All Str	
4 5							nt of Dominant S e OBL, FACW,	
		_		=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:)					alence Index V	
1							% Cover of:	Multiply by:
2								x 1 =
3							V species species	x 2 =
 5.							l species	x 3 = x 4 =
·				=Total Cov	er			x 5 =
Herb Stratum	(Plot size:) —				Colum	nn totals	(A) (B)
1.	-					Preva	lence Index =	B/A =
2.								
3.						Hydro	ophytic Veget	ation Indicators:
4.							Rapid test for	hydrophytic vegetation
5							Dominance te	
							Prevalence in	
7								adaptations* (provide
8 9.							separate shee	a in Remarks or on a
10								ydrophytic vegetation*
10				=Total Cov	er		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato		and wetland hydrology must be d or problematic
2.		_		=Total Cov	er	Veg	drophytic getation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie	o numbers her	e or on a separate		=Total Cov	er	Veg	getation	<u>No</u>
NWB083A

Profile Desci	ription: (Describe	e to the	depth needed	to docun	nent the i	ndicator	or confirm the absence	of indicators.)	
Depth	Matrix		R	edox Fea	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-40	10YR 2/1	100					Clay		
				_	-				
*Type: C =	Concentration, D	= Deple	tion, RM = Red	uced Mat	rix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:	
His	stosol (A1)		S	andy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)	
His	stic Epipedon (A2))	S	andy Red	ox (S5)		Dark Surface (S	7) (LRR K, L)	
Bla	ack Histic (A3)		S	ripped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)	
Hy	drogen Sulfide (A	4)	Lo	bamy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)	
Sti	ratified Layers (A5)	Lo	bamy Gley	yed Matrix	(F2)	X Other (explain in	remarks)	
2 0	cm Muck (A10)		D	epleted M	latrix (F3)				
De	pleted Below Darl	k Surfac	e (A11) R	edox Darl	< Surface	(F6)			
	iick Dark Surface (· · —	epleted D	ark Surfac	ce (F7)	*Indicators of hydron	nytic vegetation and wetland	
	andy Mucky Minera	. ,			ressions (, , ,	esent, unless disturbed or	
5 cm Mucky Peat or Peat (S3) problematic									
		-	,			1			
	ayer (if observed	I):					Undria Sail Dragor		
Type: Depth (inches					-		Hydric Soil Preser	it? Yes	
Deptil (inches	<i></i>				-				
Remarks:									
A12 Assume	d								
HYDROLO									
-	Irology Indicators								
-	ators (minimum of	one is r	equired; check				· · · · · ·	ators (minimum of two required)	
Surfac	e Water (A1)			_ ·	Fauna (B	,		Soil Cracks (B6)	
High W	Vater Table (A2)				quatic Plai	· · ·	0	e Patterns (B10)	
	tion (A3)				en Sulfide		· _ ·	son Water Table (C2)	
	Marks (B1)				d Rhizosp	pheres on		Burrows (C8)	
	ent Deposits (B2)			_ Roots (on Visible on Aerial Imagery (C9)	
	eposits (B3)				ce of Red		. ,	or Stressed Plants (D1)	
	Mat or Crust (B4)				Iron Redu	uction in		phic Position (D2)	
	eposits (B5)			_(C6)	al. Curfe	(07)	FAC-Ne	utral Test (D5)	
	ation Visible on Ae			_	uck Surfac	. ,			
	ely Vegetated Con				or Well Da	• •	-)		
water-	Stained Leaves (E	39)		Other (I	Explain in	Remarks	5)		
Field Observ		V		~					
Surface Wate		Yes	No	<u> </u>	_ Depth (i	· -	We	etland Hydrology	
Water Table F		Yes	No	X X	Depth (i			Present?	
	Saturation Present? Yes <u>No X</u> Depth (inches): <u>No</u> (includes capillary fringe)								
· ·		mana	monitoring		nhotos pr	evious in	Ispections), if available:		
Describe Rec	orueu Dala (Silea	iii yauye	s, monitoring we	aciidi	priotos, pr	GVIOUS III	ispections), il available.		
Remarks:									







0 40 80 120 160 200



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Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWB083

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- 🥏 Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- 🥏 Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

ject/Site:	WETLAND DETERN Lake Charlotte	City/County:	FORM - I Martin		Region Sampling Date:	10/25/2022
blicant/Owner:	Lake Charlotte Sol				Sampling Point:	NWB086A
estigator(s):	Susan Mayer		on, Township			5 T103N R30W
ndform (hillslope, terrace,			elief (concav	-	none):	None
· · · ·	Lat: 43.71664	Long:	-94.447;		Datum:	WGS84
Map Unit Name: C	anisteo-Glencoe complex, 0	to 2 percent slopes	NWI	Classificat	tion:	NA
· · · · · · · · · · · · · · · · · · ·	itions of the site typical for th				n in remarks)	
	soil , or hydrology	Significantly			ormal circumstanc	ces present? No
vegetation ,	soil , or hydrology		blematic?	(If nee	ded, explain any	answers in remarks.)
IMMARY OF FINDIN				-		
Hydrophytic Vegetation	Present? No					
Hydric Soil Present?	No	Is the sa	ampled area	within a w	vetland?	No
Wetland Hydrology Pre	esent? No	If yes, o	otional wetlar	nd site ID:		
marks:						
Recently harvested agric	ultural field.					
GETATION Use s	scientific names of plar	nts.	Indicator	Domina	ance Test Works	heet
ee Stratum (Plot		% Cover Species	Status	Domina		leet
·					of Dominant Speci OBL, FACW, or FA	
					mber of Dominant Across All Strata:	0 (B)
					of Dominant Specie OBL, FACW, or FA	
		=Total Cove	r			<u> </u>
apling/Shrub Stratum (F	Plot size:)			Prevale	ence Index Work	sheet
				Total %	Cover of:	Multiply by:
	_	_		OBL sp		x 1 =
						× 2 =
				FAC sp		(3 =
		=Total Cove		UPL sp		< 4 =
erb Stratum (F	Plot size:)	=10tal Cove	1	Columr		(A) (B)
. (i)				ence Index = B/A =	
				Hydrop	ohytic Vegetation	Indicators:
						ophytic vegetation
				D	ominance test is :	>50%
				Р	revalence index is	s ≤3.0*
				N	lorphological adap	otations* (provide
					upporting data in I	Remarks or on a
					eparate sheet)	
					roblematic hydrop	hytic vegetation [*]
a a du Min a Otratura (l		=Total Cove	er		explain)	
oody Vine Stratum (F	Plot size:)				s of hydric soil and w Inless disturbed or pi	vetland hydrology must be roblematic
		=Total Cove	r		ophytic etation	
				Pres		
marks: (Include photo nur	mbers here or on a separate	sheet)				
	mbers here or on a separate	=Total Cove	ır	Vege	etation	

NWB086A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth	Matrix		Re	dox Feat	ures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-26	10YR 2/1	100					Silty Clay			
26-28	10YR 4/1	100					Silty Clay			
28-34	2.5Y 5/3	100					Sandy Clay			
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Matr	ix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix		
Hydric Soil			•		,		Indicators for Proble	0.		
-	stosol (A1)		Sai	ndy Glev	ed Matrix	(S4)		dox (A16) (LRR K, L, R)		
	stic Epipedon (A2)			ndy Redo		()	Dark Surface (S7			
	ack Histic (A3)			-	trix (S6)			Masses (F12) (LRR K, L, R)		
	drogen Sulfide (A	4)			ky Minera	al (F1)		rk Surface (TF12)		
	atified Layers (A5	,		•	ed Matrix	. ,	Other (explain in			
	m Muck (A10)	/			atrix (F3)	. ()				
	pleted Below Dark	Surfac	·		Surface	(F6)				
	ick Dark Surface (. ,		ark Surfac		** ** * ** *			
	ndy Mucky Minera	,			essions (nytic vegetation and wetland esent, unless disturbed or		
	m Mucky Peat or				03310113 (10)	problematic			
	-									
	ayer (if observed):								
	Type: Hydric Soil Present? No									
Depth (inches										
Remarks:										
HYDROLO	GY									
Wetland Hyd	rology Indicators	5:								
Primary Indica	ators (minimum of	one is r	equired; check a	ll that ap	ply)		Secondary Indica	tors (minimum of two required)		
Surface	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)		
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)		
Saturat	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)		
Water I	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)		
Sedime	ent Deposits (B2)			Roots (C	C3)		X Saturatio	n Visible on Aerial Imagery (C9)		
Drift De	eposits (B3)			Presenc	e of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)		
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in ⁻	Tilled Soils Geomor	phic Position (D2)		
	eposits (B5)			(C6)			FAC-Net	utral Test (D5)		
	tion Visible on Ae				ck Surfac	. ,				
	ly Vegetated Con		rface (B8)	-	or Well Da					
Water-	Stained Leaves (E	39)		Other (E	xplain in	Remarks	5)			
Field Observa	ations:									
Surface Wate		Yes	No	Х	Depth (ii		\\/e	tland Hydrology		
Water Table F		Yes	No	X	Depth (ii			Present?		
Saturation Pre		Yes	No	Х	Depth (ii	nches):		No		
· ·	(includes capillary fringe)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Remarks:										
nomanð.										





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Ch	narlotte	City/	County:	Marti	n	Sampling D	Date:	10/25/2022
Applicant/Owner:		Lake Charlotte Se	olar, LLC		State:	MN	Sampling P	oint:	NWB091A
Investigator(s):		Susan Mayer		Sectio	on, Townshij	p, Range:		Sec.21 T1	03N R30W
Landform (hillslope, terrac	e, etc.):	Depres	sion	Local re	elief (concav	/e, convex	(, none):		Concave
Slope (%): 3	Lat:	43.71401		Long:	-94.442	281	Datum:		WGS84
Soil Map Unit Name:	Canisteo-C	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA
Are climatic/hydrologic co	nditions of t	he site typical for	this time c	of the year?	Yes (lf no, expla	ain in remar	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	imstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expla	ain any an	swers in remarks.)
SUMMARY OF FINE	INGS								
Hydrophytic Vegetati	on Present	? No							
Hydric Soil Present?		No		Is the sa	mpled area	a within a	wetland?		No
Wetland Hydrology F	resent?	Yes		lf ves. op	tional wetla	nd site ID:			
Remarks:									
Recently tilled agricultur			0	al field.					
VEGETATION Use	scientifi	•		<u> </u>		·	—		
Tree Stratum (P	lat a:	``		Dominant	Indicator	Domir	nance Test	Workshee	t
、	lot size:)	% Cover	Species	Status		er of Dominar		0 (1)
1 2						that are	e OBL, FACV	V, or FAC:	(A)
3.							lumber of Do s Across All		(B)
4						Percer	nt of Dominar	t Species	
5				Tatal O		that are	e OBL, FACV	V, or FAC:	<u>%</u> (A/B)
Conling/Chrub Stratum	(Plot cizo:	, -		=Total Cover		Brove	lence Index	Worksh	ot
Sapling/Shrub Stratum 1.	(Plot size:)					% Cover of:		Aultiply by:
2							species	x 1	
3.							V species	x 2	
4.							species		=
5.						FACU	species		=
				=Total Cover	r	UPL s	species	x 5	=
Herb Stratum	(Plot size:)				Colum	nn totals	(A)	(B)
1.						Preva	lence Index	= B/A =	
2.									
3						Hydro	ophytic Veg	etation In	dicators:
4						_		• •	ytic vegetation
5							Dominance		
						_	Prevalence		
7 8									ions* (provide
9.							separate sh		narks or on a
10.							•	,	ic vegetation*
				=Total Cover	r		(explain)		
Woody Vine Stratum 1.)				*Indicato	/		nd hydrology must be ematic
2				=Total Cover	r	Veg	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWB091A

Depth	Matrix	F	Redox Features						
(Inches)	Color (moist)	%	Color (moist)		Type*	Loc**	Τον	ture	Remarks
. ,	10YR 2/1	100		70	турс	LUC			Remarks
0-20		100					C C	lay	
20-28	10YR 2/1	90	2.5Y 5/2	8	D	М	C	lay	
			2.5Y 5/4	2	С	PL			Distinct or Prominent
28-36	5Y 5/2	100					С	lay	
								,	
				-	-				
*Type: C =	Concentration, D	= Denle	tion RM = Red	luced Mai	trix MS =	Masked S	Sand Grains	**Locatio	n: PL = Pore Lining, M = Matrix
Hydric Soil		- Dopic			, wo -	Maskeu			matic Hydric Soils*:
-	stosol (A1)		S	andv Glev	/ed Matrix	(\$4)			dox (A16) (LRR K, L, R)
	stic Epipedon (A2)			andy Red		(04)		k Surface (S7	
	ack Histic (A3)			-					Masses (F12) (LRR K, L, R)
	()	4)		tripped M					
	drogen Sulfide (A				cky Minera				rk Surface (TF12)
	atified Layers (A5)		-	yed Matrix	(FZ)		er (explain in	remaiks)
	m Muck (A10)				latrix (F3)				
	pleted Below Darl		· · ·		k Surface	` '			
	ick Dark Surface (. ,			ark Surfac				nytic vegetation and wetland
	ndy Mucky Minera	. ,		_ Redox Depressions (F8) hydrology must be present, unless disturb problematic					
50	m Mucky Peat or	Peat (S	3)				problem	allo	
Restrictive L	ayer (if observed	l):							
Гуре:									
					_		Hydric	Soil Presen	t? <u>No</u>
Depth (inches Remarks:	s):				_		Hydric	: Soil Presen	t? <u>No</u>
Depth (inches Remarks:					-		Hydric	Soil Presen	t? <u>No</u>
Depth (inches Remarks:	GY				-		Hydric	Soil Presen	t? <u>No</u>
Depth (inches Remarks: HYDROLO Wetland Hyd	GY rology Indicators				-				
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic	GY rology Indicators ators (minimum of		equired; check					ondary Indica	tors (minimum of two required)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic	GY rology Indicators		equired; check		- - - - - - - - - - - - - - - - - - -	13)		ondary Indica	tors (minimum of two required) Soil Cracks (B6)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indica Surfac	GY rology Indicators ators (minimum of		equired; check	Aquatio	: Fauna (B quatic Plar	nts (B14)	Sec	ondary Indica	tors (minimum of two required)
Cepth (inches Remarks: HYDROLO Wetland Hyd Primary Indic: Surfac High V	GY rology Indicators ators (minimum of e Water (A1)		equired; check	Aquatic True Ac Hydrog	: Fauna (B quatic Plar en Sulfide	nts (B14) Odor (C	<u>Sec</u>	ondary Indica Surface 3 Drainage	tors (minimum of two required) Soil Cracks (B6)
Pepth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks Remarks Surfac Surfac Surfac Surfac Surfac Surfac Surfac Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		equired; check	Aquatic True Ac Hydrog Oxidize	: Fauna (B quatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	<u>Sec</u>	ondary Indica Surface = Drainage Dry-Seas Crayfish	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
Approximation of the second se	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; check	Aquatio True Ad Hydrog Oxidize Roots (: Fauna (B quatic Plar en Sulfide d Rhizosp C3)	nts (B14) Odor (C oheres on	<u>Sec</u> 1) Living	ondary Indica Surface S Drainage Dry-Seas Crayfish X Saturatic	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9
Pepth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac Surfac High V Satura Satura Water Sedim Drift D	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; check	Aquatio True Ad Hydrog Oxidize Roots (Presen	: Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron	1) Living (C4)	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatic Stunted 6	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1)
Appendix Content of the second	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)		equired; check	Aquatio True Ao Hydrog Oxidize Roots (Presen Recent	: Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron	<u>Sec</u> 1) Living	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatio Stunted 0 X Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)
Argenter (inchesse) Pepth (inchesse) Permarks: Argent Argent Primary Indica Primary Indica Surfac Argent Argent Primary Indica Surfac Surfac Migh V Satura Drift D Algal M Iron De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	<u>one is r</u>		Aquatio True Ao Hydrog Oxidize Roots (Presen Recent (C6)	Fauna (B quatic Plar en Sulfide d Rhizosp C3) Ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T	1) Living (C4)	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatio Stunted 0 X Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1)
Pepth (inches Remarks: Remarks: Remarks: Remarks: Primary Indic: Surfac Surfac High V Satura Water Sedim Drift D Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae	<u>one is r</u> rial Imag	 gery (B7)	Aquation True Ad Hydrog Oxidize Roots (Presen Recent (C6) Thin M	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	1) Living (C4)	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatio Stunted 0 X Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)
Pepth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac Surf	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con	<u>one is r</u> rial Imag cave Su	 gery (B7)	Aquatic True A Hydrog Oxidize Roots (Presen Recent (C6) Thin M Gauge	Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da	nts (B14) Odor (C oheres on ucced Iron uction in T ce (C7) ata (D9)	1) Living (C4) Tilled Soils	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatio Stunted 0 X Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)
Pepth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac Surf	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae	<u>one is r</u> rial Imag cave Su	 gery (B7)	Aquatic True A Hydrog Oxidize Roots (Presen Recent (C6) Thin M Gauge	Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on ucced Iron uction in T ce (C7) ata (D9)	1) Living (C4) Tilled Soils	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatio Stunted 0 X Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)
Algal M Algal M Correction of the sector o	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations:	rial Imag cave Su 39)	gery (B7)	Aquation True Ad Hydrog Oxidize Roots (Presen Recent (C6) Thin Ma Gauge Other (Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in	nts (B14) Odor (C oheres on ucced Iron uction in T ce (C7) ata (D9) Remarks	1) Living (C4) Tilled Soils	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatio Stunted 0 X Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2)
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Pepth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac Satura Water Sedim Drift D Satura Sedim Drift D Satura Sedim Iron Da Inunda Sparse Water- Field Observ Surface Water Saturation Pro (includes cap	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7) Inface (B8) No No No	Aquatic True A Hydrog Oxidize Roots (Presen (C6) Thin M Gauge Other (X X	Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii 	nts (B14) Odor (C oheres on uced Iron uction in 7 ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatic Stunted 0 X Geomorp FAC-Neu	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
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Pepth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac Satura Water Sedim Drift D Satura Sedim Drift D Satura Sedim Iron Da Inunda Sparse Water- Field Observ Surface Water Saturation Pro (includes cap	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7) Inface (B8) No No No	Aquatic True A Hydrog Oxidize Roots (Presen (C6) Thin M Gauge Other (X X	Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii 	nts (B14) Odor (C oheres on uced Iron uction in 7 ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils	ondary Indica Surface 3 Drainage Dry-Seas Crayfish X Saturatic Stunted 0 X Geomorp FAC-Neu	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) obic Position (D2) utral Test (D5)





Signature: NV





×262



Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

Signature: NV

Feature ID: NWB091

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review

			ETERM					-		
Project/Site:	Lake C	harlotte		-	County:	Marti		Sampling D		10/25/2022
Applicant/Owner:		Lake Charl		, LLC	0	State:	MN	Sampling Po		NWB093A
Investigator(s):		Susan May				on, Townshi	-	-	Sec.16 T10	
Landform (hillslope, terra	. ,		Plain			elief (conca				None
Slope (%): 1	Lat:		2599	~	Long:	-94.439		Datum:		VGS84
Soil Map Unit Name:		wanlake com					'I Classific			NA
Are climatic/hydrologic c		• •		time	•	· `	•	lain in remark	,	
<u> </u>		, or hydr	-		Significantly			"normal circur		
Are vegetation SUMMARY OF FIN	, soil	, or hydr	ology _		naturally pro	blematic?	(If ne	eeded, expla	in any ans	wers in remarks.)
Hydrophytic Vegeta	ation Presen	t?	No							
Hydric Soil Present	?	•	Yes		Is the sa	ampled area	a within a	wetland?	I	No
Wetland Hydrology	Present?	_	No		lf yes, op	otional wetla	nd site ID	:		
Remarks:										
VEGETATION Us	se scientif	ic names	of plant	s.						
			Abs	solute	Dominant	Indicator	Domi	nance Test V	Vorksheet	
Tree Stratum (Plot size:	30)	%	Cover	Species	Status		er of Dominan e OBL, FACW		(A)
2 3								Number of Dor es Across All S		(B)
4 5								nt of Dominant e OBL, FACW		(A/B)
					=Total Cove	r				
Sapling/Shrub Stratum	(Plot size:	15)					alence Index		
1								% Cover of:		ultiply by:
2 3								species N species	$\begin{array}{c} 0 \\ 0 \\ 0 \\ x 2 = \end{array}$	
4.								species	$\frac{0}{0}$ x 3 =	
5.								. –	$\frac{0}{0}$ x 4 =	
					=Total Cove	r		· —	$\frac{1}{40}$ x 5 =	
Herb Stratum	(Plot size:	5)		-		Colur	nn totals	40 (A)	200 (B)
1. <i>Zea mays</i> 2.				40	Y	UPL	Preva	alence Index :	= B/A =	5
3							Hydr	ophytic Vege	etation Ind	icators:
4.								Rapid test fo	r hydrophy	tic vegetation
5.								Dominance t	est is >50%	, 0
6							_	Prevalence i	ndex is ≤3.	0*
7								Morphologic		
8							_	supporting d		arks or on a
9								separate she		4 - 4 ² +
10				40	Tatal Oan		_	Problematic	hydrophytic	c vegetation [*]
Woody Vine Stratum	(Plot size:)	40	=Total Cove	r		(explain) ors of hydric so , unless disturb		d hydrology must be natic
					=Total Cove	r	Ve	drophytic getation esent?	No	
Remarks: (Include photo Agricultural field. Bare gr		re or on a s	eparate s	heet)						

NWB093A

Profile Desci	ription: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)	
Depth	Matrix		Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-40	10YR 2/1	100		,,,	. , po		Clay		
0-40	1011(2/1	100					Ciay		
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:	
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)	
His	stic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)	
Bla	ack Histic (A3)		Str	ipped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)	
Hy	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)	
	ratified Layers (A5	,		•	ed Matrix	. ,	X Other (explain in		
	cm Muck (A10)				atrix (F3)	. /		·	
	pleted Below Darl	k Surfac		•	Surface	(F6)			
	ick Dark Surface (ark Surfac	· · /			
	indy Mucky Minera				ressions (j 1	nytic vegetation and wetland esent, unless disturbed or	
					65510115 (F0)	problematic	esent, unless disturbed of	
	cm Mucky Peat or	real (S	3)				•		
Restrictive L	ayer (if observed	l):							
Туре:					-		Hydric Soil Preser	t? Yes	
Depth (inches	s):				_				
Remarks:									
Remarks.									
A12 Assume	d								
ATZ ASSume	a								
HYDROLO	GY								
	rology Indicators								
-	ators (minimum of		equired: check a	ll that an			Secondary Indica	ators (minimum of two required)	
		0110 15 1	equiled, check a			40)		· · · · ·	
	e Water (A1)			-	Fauna (B			Soil Cracks (B6)	
0	Vater Table (A2)			- '	uatic Plar	· · ·	*	e Patterns (B10)	
	tion (A3)		. <u> </u>		en Sulfide		· · · · · · · · · · · · · · · · · · ·	son Water Table (C2)	
	Marks (B1)				d Rhizosp	heres on	· _ ·	Burrows (C8)	
	ent Deposits (B2)		. <u> </u>	Roots (0				on Visible on Aerial Imagery (C9)	
	eposits (B3)		. <u></u>	-	e of Redu		· · ·	or Stressed Plants (D1)	
-	Aat or Crust (B4)				Iron Redu	iction in T		phic Position (D2)	
	eposits (B5)		. <u></u>	(C6)			FAC-Ne	utral Test (D5)	
	tion Visible on Ae			-	ick Surfac				
Sparse	ely Vegetated Con	cave Su	rface (B8)	Gauge	or Well Da	ata (D9)			
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	5)		
Field Observ	ations:								
Surface Wate	r Present?	Yes	No	Х	Depth (ii	nches):		den dille de cl	
Water Table F	Present?	Yes	No	Х	Depth (ii	nches):	We	tland Hydrology Present?	
Saturation Pre	esent?	Yes	No	Х	Depth (ii	nches):		No No	
(includes cap	includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Remarks:									







1148

Signature: NV

2017



9999 1150 /2019 1148 Signature: DO







Feature ID: NWB093

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

			ETERN					-		40/05/0000
Project/Site:	Lake C	harlotte	latta Cal		County:	Marti		Sampling		10/25/2022
Applicant/Owner:		Lake Charl		ar, LLC	0	_State:	MN	Sampling		NWB094A
Investigator(s):		Susan May				on, Townshi		-	Sec.16	103N R30W
Landform (hillslope, ter	. ,		Plain			relief (conca	-			None
Slope (%): 0			72534		Long:	-94.438		Datum:		WGS84
Soil Map Unit Name:			-		cent slopes		/I Classific			NA
Are climatic/hydrologic				his time d	-			ain in rema	,	
		, or hydr	0,			/ disturbed?		normal circ		•
Are vegetation SUMMARY OF FI	, soil	, or hydr	rology		naturally pr	oblematic?	(If ne	eded, exp	lain any a	nswers in remarks.)
Hydrophytic Vege	etation Presen	t?	No							
Hydric Soil Prese	nt?		No		Is the s	ampled area	a within a	wetland?		Νο
Wetland Hydrolog	gy Present?	_	No		lf yes, o	ptional wetla	and site ID	·		
Remarks:										
VEGETATION U	Jse scientif	ic names	•							_
Troe Streture	(Dist size)	20			Dominant	Indicator	Domi	nance Test	Workshe	et
Tree Stratum 1.	(Plot size:	30)	% Cover	Species	Status		er of Domina e OBL, FAC		
2. 3.								Number of D s Across Al		(B)
4 5								nt of Domina e OBL, FAC		
					=Total Cove	er		- , -	,	· · · ·
Sapling/Shrub Stratur	n (Plot size:	15)		-		Preva	alence Inde	ex Worksl	leet
1							Total	% Cover of	:	Multiply by:
2								species	0 x	=
3.								V species	<u> </u>	2 =
4								species _		B = <u>0</u>
5					Tatal O			J species		I = 0
Llash Otratura			、 —		=Total Cove	ər		species		5 = 200 (D)
Herb Stratum 1. Zea mays	(Plot size:	5)	40	Y	UPL		nn totals	`	A) <u>200</u> (B) 5
2				-		UFL	Fleva		x = D/A =	5
2							Hydro	ophytic Ve	getation I	ndicators:
4									-	hytic vegetation
5								Dominance		
6								Prevalence	e index is :	3.0 *
7.								Morpholog	ical adapta	ations* (provide
8.								supporting	data in Re	emarks or on a
9								separate s		
10							_	Problemati	c hydroph	ytic vegetation*
				40	=Total Cove	ər		(explain)		
Woody Vine Stratum			_)					ors of hydric : , unless distu		land hydrology must be plematic
2					=Total Cove	er	Veç	drophytic getation esent?	No	
Remarks: (Include pho Agricultural field. Bare		e or on a s	separate	sheet)						

NWB094A

Profile Descr	ription: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth	Matrix		Re	dox Feat	tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-32	10YR 2/1	100					Clay Loam			
32-40	2.5Y 5/3	100					Sandy Clay			
*Turnet C =	Concentration D	- Donia	tion DM	and Mat	iv MC	Magkad	Cond Croine **Leasti	DI - Dere Lining M - Metrix		
	Concentration, D	= Depie	etion, Rivi = Redu	iced Mati	TIX, IVIS =	Masked		on: PL = Pore Lining, M = Matrix		
Hydric Soil	stosol (A1)		Sa	adv Glov	ed Matrix	(\$4)		ematic Hydric Soils*: dox (A16) (LRR K, L, R)		
	stic Epipedon (A2)			ndy Redo		(34)	Dark Surface (S			
	ack Histic (A3)			-	atrix (S6)			Masses (F12) (LRR K, L, R)		
	drogen Sulfide (A3)	4)			ky Minera			rk Surface (TF12)		
*	atified Layers (A5	,		•	red Matrix	. ,	Other (explain in			
	cm Muck (A10))			atrix (F3)	((Z)		Temanaj		
	pleted Below Darl	k Surfac			Surface	(F6)				
	ick Dark Surface (· · · —		ark Surfac	. ,				
	ndy Mucky Minera				ressions (nytic vegetation and wetland esent, unless disturbed or		
	m Mucky Peat or				03310113 (10)	problematic			
	-		-,			1				
	ayer (if observed	l):					Hudria Sail Brasar	*2 No		
Type: Depth (inches	···									
Deptil (mones	<i></i>				-					
Remarks:										
	0)/									
HYDROLO										
-	rology Indicators		aquirad: abaak a	ll that an	nhu)		Secondary India	store (minimum of two required)		
-	ators (minimum of	one is i	equired, check a			40)	· · · ·	ators (minimum of two required)		
	e Water (A1)				Fauna (B			Soil Cracks (B6)		
0	/ater Table (A2)				uatic Plai	. ,		e Patterns (B10)		
	tion (A3) Marka (B1)				en Sulfide	•	· ·	son Water Table (C2)		
	Marks (B1) ent Deposits (B2)			Roots (C	d Rhizosp	oneres on		Burrows (C8) on Visible on Aerial Imagery (C9)		
	eposits (B3)				ce of Red	uced Iron		or Stressed Plants (D1)		
	Mat or Crust (B4)			•			· · · ·	phic Position (D2)		
	eposits (B5)			(C6)				utral Test (D5)		
	tion Visible on Ae	rial Imag	gery (B7)	•	ick Surfac	ce (C7)	_			
Sparse	ely Vegetated Con	cave Su	urface (B8)	Gauge of	or Well Da	ata (D9)				
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	6)			
Field Observ	ations:									
Surface Wate	r Present?	Yes	No	Х	Depth (i	nches):		Mand Uvdralam.		
Water Table F	Present?	Yes	No	Х	Depth (i		VV6	etland Hydrology Present?		
Saturation Pre		Yes	No	Х	Depth (i	nches):		No		
	includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Describe Rec	orded Data (stream	m gauge	e, monitoring wel	i, aeriai p	motos, pr	evious in	ispections), it available:			
Remarks:										











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Feature ID: NWB094

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot \bigcirc
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review



Impling Date: 10/25/2022 Impling Point: NWB097A Sec.16 T103N R30W Ine): None turm: WGS84 In remarks) nal circumstances present? No d, explain any answers in remarks.) and? No er Test Worksheet Dominant Species 0 L, FACW, or FAC: 0 All Strata: 1 Sec Test Worksheet 0%
ne): None tum: WGS84 : NA n remarks) hal circumstances present? No d, explain any answers in remarks.) and? No and? N
tum: WGS84 NA Na remarks) nal circumstances present? No d, explain any answers in remarks.) and? No and? No ere Test Worksheet Dominant Species L, FACW, or FAC: 0 (A) ere of Dominant ross All Strata: 1 (B) Dominant Species Dominant Species
NA n remarks) nal circumstances present? <u>No</u> d, explain any answers in remarks.) and? <u>No</u> and? <u>No</u> e Test Worksheet Dominant Species L, FACW, or FAC: <u>0</u> (A) er of Dominant ross All Strata: <u>1</u> (B) Dominant Species Dominant Species
n remarks) hal circumstances present? No d, explain any answers in remarks.) and? No a
Anal circumstances present? No d, explain any answers in remarks.) And? No The Test Worksheet Dominant Species L, FACW, or FAC: 0 (A) er of Dominant ross All Strata: 1 (B) Dominant Species
d, explain any answers in remarks.) and? No The Test Worksheet Dominant Species L, FACW, or FAC: 0 (A) er of Dominant ross All Strata: 1 (B) Dominant Species
and? No er Test Worksheet Dominant Species L, FACW, or FAC: 0 (A) eer of Dominant ross All Strata: 1 (B) Dominant Species Dominant Species
e Test Worksheet Dominant Species L, FACW, or FAC: (A) er of Dominant ross All Strata: (B) Dominant Species
e Test Worksheet Dominant Species L, FACW, or FAC: 0 (A) er of Dominant ross All Strata: 1 (B) Dominant Species
e Test Worksheet Dominant Species L, FACW, or FAC: (A) er of Dominant ross All Strata: (B) Dominant Species
Dominant Species L, FACW, or FAC: <u>0</u> (A) er of Dominant ross All Strata: <u>1</u> (B) Dominant Species
Dominant Species L, FACW, or FAC: <u>0</u> (A) er of Dominant ross All Strata: <u>1</u> (B) Dominant Species
Dominant Species L, FACW, or FAC: <u>0</u> (A) er of Dominant ross All Strata: <u>1</u> (B) Dominant Species
Dominant Species L, FACW, or FAC: <u>0</u> (A) er of Dominant ross All Strata: <u>1</u> (B) Dominant Species
er of Dominant ross All Strata: <u>1</u> (B) Dominant Species
Dominant Species
(()
e Index Worksheet
over of: Multiply by:
es <u>0</u> x 1 = <u>0</u>
ecies $0 \times 2 = 0$
$\frac{1}{2} \cos \frac{1}{2} \cos \frac{1}$
cies 0 $x 4 = 0$ es 40 $x 5 = 200$
es $40 \times 5 = 200$ tals $40 \times 6 = 200$ (B)
e Index = $B/A = 5$
tic Vegetation Indicators:
id test for hydrophytic vegetation
ninance test is >50%
alence index is ≤3.0*
phological adaptations* (provide
porting data in Remarks or on a
arate sheet)
elematic hydrophytic vegetation*
lain) hydric soil and wetland hydrology must be ss disturbed or problematic
hytic
y pi r v T F a b p f

NWB097A

Profile Descr	ription: (Describe	to the	depth needed	to docum	nent the i	ndicator	or confirm the absence	e of indicators.)
Depth	Matrix		<u>R</u>	edox Fea	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-16	10YR 2/1	100					Clay	
16-21	10YR 2/1	90	2.5Y 5/3	10	С	PL/M	Clay	Distinct or Prominent
21-30	2.5Y 5/3	60	2.5Y 6/8	5	C	PL	Clay	
21-30			2.31 0/8	5	C	FL	Ciay	
	10YR 2/1	35						Mixed Matrix
*T		Devis	fin DM Ded				**!	i Di Dina Linin M. Matria
	Concentration, D	= Deple	etion, RM = Red	uced Mat	rix, MS =	Masked		ion: PL = Pore Lining, M = Matrix
Hydric Soil			6		ad Matrix			lematic Hydric Soils*:
	stosol (A1)				ed Matrix	(34)		edox (A16) (LRR K, L, R)
	stic Epipedon (A2)			andy Red			Dark Surface (S	
	ack Histic (A3)	4)		ripped Ma	· · ·			e Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	,			ky Minera			ark Surface (TF12)
	atified Layers (A5 m Muck (A10))			ed Matrix	(Г2)	Other (explain i	n remarks)
	pleted Below Darl	Curfor			atrix (F3) Surface			
	ick Dark Surface (· · _			. ,		
					ark Surfac			ohytic vegetation and wetland
	ndy Mucky Minera m Mucky Peat or	. ,			ressions ((го)	problematic	present, unless disturbed or
			3)			1	•	
	ayer (if observed	l):						
Type:	\ \				-		Hydric Soil Prese	nt? <u>No</u>
Depth (inches	<i></i>				-			
HYDROLO	GY							
Wetland Hyd	rology Indicators	s:						
Primary Indica	ators (minimum of	one is i	equired; check	all that ap	oply)		Secondary Indi	cators (minimum of two required)
Surfac	e Water (A1)			Aquatic	Fauna (B	313)	Surface	e Soil Cracks (B6)
High W	/ater Table (A2)			True Ac	uatic Plai	nts (B14)	Draina	ge Patterns (B10)
Satura	tion (A3)			_ Hydroge	en Sulfide	Odor (C	1) Dry-Se	ason Water Table (C2)
Water	Marks (B1)			Oxidize	d Rhizosp	heres on	Living Crayfis	h Burrows (C8)
Sedime	ent Deposits (B2)			Roots (C3)		X Satura	ion Visible on Aerial Imagery (C9)
	eposits (B3)			_	ce of Red		· · ·	d or Stressed Plants (D1)
	lat or Crust (B4)				Iron Redu	uction in T		rphic Position (D2)
	eposits (B5)		·	_(C6)		(- -)	FAC-N	eutral Test (D5)
	tion Visible on Ae			_	ick Surfac	. ,		
	ly Vegetated Con		irface (B8)	_	or Well Da		`	
	Stained Leaves (E	39)			Explain in	Remarks	s)	
Field Observ				Ň	D (1)()			
Surface Wate		Yes	No	$\frac{X}{X}$	Depth (i	· -	N	etland Hydrology
Water Table F Saturation Pre		Yes Yes	No No	× X	Depth (in Depth			Present? No
(includes capi		162			_ Deptil (I			INU
· ·		m ຕອບດ	e, monitorina we	ell, aerial r	ohotos pr	evious in	spections), if available:	
	Lines Data (offod	gaugi	-,	, aonan	, pi	2		
Remarks:								





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

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Ser and a series

A1





Feature ID: NWB097

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot \bigcirc
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	st Regior	1	
Project/Site:	Lake Cl	harlotte	City/	County:	Marti	n	Sampling	Date:	10/25/2022
Applicant/Owner:		Lake Charlotte Se	olar, LLC		State:	MN	Sampling I	Point:	NWB098A
Investigator(s):		Susan Mayer		Sectio	on, Townshi	p, Range:		Sec.16 T	103N R30W
Landform (hillslope, terrac	e, etc.):	Depres	sion	Local re	elief (conca	ve, conve	k, none):		Concave
Slope (%): 2	Lat:	43.7243		Long:	-94.442	266	Datum:		WGS84
Soil Map Unit Name:	Canisteo-(Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA
Are climatic/hydrologic cor	nditions of f	the site typical for	this time o	of the year?	Yes (lf no, expl	ain in rema	rks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expl	ain any ar	nswers in remarks.)
SUMMARY OF FIND	INGS								
Hydrophytic Vegetati	on Present	? No							
Hydric Soil Present?		Yes		Is the sa	mpled area	a within a	wetland?		No
Wetland Hydrology P	'resent?	No		lf yes, op	tional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultura			0	al field.					
VEGETATION Use	scientifi	•		<u> </u>		<u> </u>	—		
Tree Stratum (PI		``		Dominant Species	Indicator	Domi	nance Test	worksnee	ət
1.	ot size:)	% Cover	Species	Status		er of Domina		o (A)
2						that are	e OBL, FAC	W, or FAC:	(A)
3.							Number of Des Across All		(B)
4							nt of Domina		
5				=Total Cove	r	that are	e OBL, FAC	W, or FAC:	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:) -				Preva	alence Inde	x Worksh	eet
1.	(1 101 0120.	/					% Cover of		Multiply by:
2.							species	x 1	
3.							· V species	x 2	=
4.						FAC	species	x 3	=
5.						FACL	J species		=
		-		=Total Cove	r	UPLs	species	x 5	=
Herb Stratum	(Plot size:)				Colun	nn totals	(A	(B)
1						Preva	lence Index	(= B/A =	
2									
3						-	ophytic Ve	-	
4							•	• •	nytic vegetation
5 6							Dominance Prevalence		
7									tions* (provide
8.									marks or on a
9.							separate sl		
10.							Problemati	c hydrophy	tic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.)					ors of hydric s unless distu		and hydrology must be lematic
2		-		=Total Cove	r	Veç	drophytic getation esent?	No	
Remarks: (Include photo n Recently tilled agricultural			te sheet)						

NWB098A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth <u>Matrix</u>			Re	dox Feat	ures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-40	10YR 2/1	100					Clay			
*Type: C =	Concentration, D	= Deple	tion. RM = Redu	ced Mat	ix. MS =	Masked S	Sand Grains. **Locatio	on: PL = Pore Lining, M = Matrix		
Hydric Soil		Dobio					Indicators for Proble	0.		
-	stosol (A1)		Sa	ndv Glev	ed Matrix	(S4)		dox (A16) (LRR K, L, R)		
	stic Epipedon (A2)			ndy Redo		(01)	Dark Surface (S7) (LRR K, L)			
	ack Histic (A3)			-	trix (S6)		Iron-Manganese Masses (F12) (LRR K, L, R)			
	drogen Sulfide (A	1)		••	ky Minera			Very Shallow Dark Surface (TF12)		
	0	,		•	ed Matrix	. ,				
	atified Layers (A5)		• •		(Г2)	X Other (explain in	iciiidiks)		
	m Muck (A10)	. 0			atrix (F3)					
	pleted Below Darl		· · · —		Surface	. ,				
	ick Dark Surface (,			ark Surfac		, , ,	nytic vegetation and wetland		
	ndy Mucky Minera			dox Depr	essions (F8)	hydrology must be pr problematic	esent, unless disturbed or		
5 c	m Mucky Peat or	Peat (S	3)				problematic			
Restrictive La	ayer (if observed):								
Туре:							Hydric Soil Presen	t? Yes		
Depth (inches	s):									
Demenden										
Remarks:										
A12 Assume	d									
ATZ ASSUME	u									
HYDROLO	GV									
	rology Indicators									
-	ators (minimum of		equired: check a	ll that an	nlv)		Secondary Indica	ators (minimum of two required)		
		0110 15 1	equired, check a			10)				
	e Water (A1)				Fauna (B			Soil Cracks (B6)		
	/ater Table (A2)				uatic Plar	• •		Drainage Patterns (B10)		
Saturation (A3)					en Sulfide		· · ·	Dry-Season Water Table (C2)		
Water		Oxidized Rhizospheres on Living Crayfish Burrows (C8)								
Sedime		Roots (C3) Saturation Visible on Aerial Imagery								
							or Stressed Plants (D1)			
	Mat or Crust (B4)				Iron Reau	Iction in		phic Position (D2)		
	eposits (B5)	iol Imo		(C6)	al Curfa	a (C7)	FAC-Ne	utral Test (D5)		
	tion Visible on Ae				ck Surfac	. ,				
Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9)										
Water-Stained Leaves (B9)Other (Explain in Remarks)										
Field Observ					_					
Surface Wate		Yes	No	<u>X</u>	Depth (ii	· _	We	tland Hydrology		
Water Table F		Yes	No No	X	Depth (ii		""	Present?		
Saturation Pre		Yes	No	Х	Depth (ir	nches):		No		
(includes capillary fringe)										
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Remarks:										
Nemarks.										





Signature: NV

Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

Signature: NSS

A1







Feature ID: NWB098

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

							-	40/05/0000
Project/Site: Applicant/Owner:	Lake C	harlotte Lake Charlot		y/County:	Martii State:	MN	Sampling Date: Sampling Point:	10/25/2022 NWB099A
Investigator(s):		Susan Mayer			ion, Townshi			16 T103N R30W
Landform (hillslope, terra	ace etc.):		Plain		relief (concav	-		None
Slope (%): 0	Lat:	43.72		Long:	-94.441	,	Datum:	WGS84
Soil Map Unit Name:		Glencoe comp		- °-		T Classifica		NA
Are climatic/hydrologic c		-	-	-			ain in remarks)	
		, or hydrol		-	y disturbed?		normal circumsta	inces present? No
Are vegetation	, soil	, or hydrol			oblematic?			ny answers in remarks.)
SUMMARY OF FIN		, or riyuror			obiernatio.			
Hydrophytic Vegeta	ation Presen	t? N	lo					
Hydric Soil Present	?	N	lo	Is the s	ampled area	a within a	wetland?	No
Wetland Hydrology	Present?	N	lo	lf yes, c	ptional wetla	nd site ID:	:	
Remarks:	<u>.</u>							
VEGETATION Us	se scientif	ic names o	•	Deminant	lu di seten	Damin		
Tree Stratum (Plot size:	30)		Dominant r Species	Indicator Status	Domir	nance Test Work	Isneet
1	FIOI SIZE.)	78 COVE	i opecies	Status		er of Dominant Spe e OBL, FACW, or I	
2 3							Number of Dominal s Across All Strata	
4 5							nt of Dominant Spe e OBL, FACW, or I	
				=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:	: 15)			Preva	lence Index Wo	rksheet
1							% Cover of:	Multiply by:
2							species 0	x 1 = 0
3							V species 0	$x^{2} = 0$ x 3 = 0
4 5.							species 0 I species 0	x 3 = 0 x 4 = 0
				=Total Cov	er		species 40	x = 0 x = 200
Herb Stratum	(Plot size:	: 5)	_			nn totals 40	(A) 200 (B)
1. Zea mays	,		40	Y	UPL	Preva	lence Index = B/A	_ ()()
2.								
3						Hydro	ophytic Vegetati	on Indicators:
4.							Rapid test for hyd	drophytic vegetation
5							Dominance test i	
							Prevalence index	
7								laptations* (provide
8 9.							supporting data in separate sheet)	n Remarks or on a
10								ophytic vegetation*
10			40	=Total Cov	er		(explain)	ophylic vegetation
Woody Vine Stratum	(Plot size:)			*Indicato	,	d wetland hydrology must be r problematic
				_=Total Cov	er	Hyc	drophytic getation	No
Remarks: (Include photo Agricultural field. Bare gi		ere or on a se	oarate sheet)					

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Profile Descr	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth <u>Matrix</u>			Re	dox Feat	tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-19	10YR 2/1	100					Clay Loam			
19-22	10YR 2/1	60					Clay			
13 22							oldy	5.45 × 1.5.4 × 1.		
	2.5Y 5/4	40						Mixed Matrix		
22-30	2.5Y 5/4	96	7.5YR 5/8	2	С	PL	Clay	Distinct or Prominent		
			10YR 2/1	2	Fe/Mn Nodules	PL/M				
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mat	rix, MS =	Masked	Sand Grains. **Locat	on: PL = Pore Lining, M = Matrix		
Hydric Soil Indicators: Indicators for Problematic Hydric Soils*:										
	stosol (A1)				ed Matrix	(S4)	Coast Prairie Redox (A16) (LRR K, L, R)			
	stic Epipedon (A2)			ndy Redo	. ,		Dark Surface (S7) (LRR K, L)			
	ack Histic (A3)			••	atrix (S6)		Iron-Manganese Masses (F12) (LRR K, L, R)			
	drogen Sulfide (A	,		•	ky Minera	. ,		Very Shallow Dark Surface (TF12)		
	atified Layers (A5)		• •	ed Matrix	: (F2)	Other (explain in	n remarks)		
	m Muck (A10)				atrix (F3)	(==)				
	pleted Below Darl		· · · <u> </u>		Surface	. ,				
	ick Dark Surface (· ·			ark Surfac			hytic vegetation and wetland		
	ndy Mucky Minera	` '		dox Depi	essions (F8)	hydrology must be p problematic	resent, unless disturbed or		
<u> </u>	m Mucky Peat or	Peat (S	3)			-	problematio			
Restrictive La	ayer (if observed	l):								
Туре:					-		Hydric Soil Prese	nt? <u>No</u>		
Depth (inches):				-					
Remarks.	Remarks:									
HYDROLO	GY									
	rology Indicators									
-	ators (minimum of		equired: check a	ll that ap	olv)		Secondary Indic	ators (minimum of two required)		
-	e Water (A1)		oquirou, onook a		Fauna (B	(13)		Soil Cracks (B6)		
High W	·	•	uatic Plar	,	Drainage Patterns (B10)					
Saturat			en Sulfide							
Water			d Rhizosp							
Sedime		Roots (•		• ·	Saturation Visible on Aerial Imagery (C9)				
	eposits (B3)			Presence of Reduced Iron (C4) Stunted or Stressed Plants (
Algal M			Recent Iron Reduction in Tilled Soils Geomorphic Position (D2)							
Iron De	Iron Deposits (B5) (C6) FAC-Neutral Test (D5)									
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	e (C7):				
Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9)										
Water-Stained Leaves (B9) Other (Explain in Remarks)										
Field Observations:										
Surface Wate		Yes	No	Х	Depth (ii	· · -	w	etland Hydrology		
Water Table F		Yes	No	Х	Depth (ii	· -		Wetland Hydrology Present?		
Saturation Pre		Yes	No	Х	Depth (ii	nches):		No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Remarks:										
1										






0 40 80 120 160 200 Feet





1156





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500



Feature ID: NWB099

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Drojost/Sitos							U	10/05/0000
Project/Site: Applicant/Owner:	Lake Cł	Lake Charlotte S		/County:	Martin State:	MN	Sampling Date: Sampling Point:	10/25/2022 NWB100A
Investigator(s):		Susan Mayer		Sect	tion, Township		1 0	16 T103N R30W
Landform (hillslope, te		Depres	ssion		relief (concav	-		Concave
Slope (%): 2	. ,	43.72848		Long:	-94.4413		Datum:	WGS84
Soil Map Unit Name:		am, 1 to 3 percen				Classific		PEM1Af
Are climatic/hydrologic		-		of the vear?			ain in remarks)	
		, or hydrology			y disturbed?	•	normal circumsta	nces present? No
Are vegetation	, soil	, or hydrology	-	-	roblematic?			y answers in remarks.
SUMMARY OF F		, or injurcicity				(iouou, onpium ui	
Hydrophytic Veg	etation Present	t? No	_					
Hydric Soil Prese	ent?	No	_	Is the s	sampled area	within a	wetland?	No
Wetland Hydrolo	gy Present?	Yes	_	lf yes, c	optional wetlan	nd site ID:	:	
Remarks:								
VEGETATION	Use scientifi	ic names of pl				1		-
Tree Streturn		20)		Dominant	Indicator	Domii	nance Test Work	sheet
Tree Stratum 1.	(Plot size:	30)	% Cover	Species	Status		er of Dominant Spe e OBL, FACW, or F	
2 3							Number of Dominar es Across All Strata	
Б							nt of Dominant Spe e OBL, FACW, or F	
				=Total Cov	er	that ar	0002,171011,011	,
Sapling/Shrub Stratu	m (Plot size:	15)				Preva	alence Index Wor	ksheet
1						Total	% Cover of:	Multiply by:
2						OBL	species 0	x 1 =0
3						-	V species 0	x 2 =
4							species 0	x = 0
5				Total Car		_	J species 0	x 4 = 0
Herb Stratum	(Plot size:	5)		=Total Cov	er		species 40 nn totals 40	x 5 = 200 (A) 200 (B)
1. Zea mays	(FIOL 3126.)	40	Y	UPL		alence Index = B/A	
<u></u>								
3						Hvdro	ophytic Vegetatio	on Indicators:
4						-		Irophytic vegetation
5							Dominance test is	s >50%
6.							Prevalence index	is ≤3.0*
7							Morphological ad	aptations* (provide
8						_	supporting data ir	n Remarks or on a
9							separate sheet)	
10							-	ophytic vegetation*
			40	=Total Cov	er		(explain)	
Woody Vine Stratum		(15)					ors of hydric soil and , unless disturbed or	wetland hydrology must be problematic
2				=Total Cov	er	Veg	drophytic getation esent? <u>N</u>	0
Remarks: (Include pho		re or on a separa	ate sheet)					

NWB100A

Depth (inches) Matrix Color (moist) Bodox Freekurgs (moist) Texture Remarks 24-30 26Y 63 90 7.5YR 60 6 C PL Smidy Cay Take Gavet Deleted or Prominent 24-30 25Y 63 90 7.5YR 60 6 C PL Smidy Cay Take Gavet Deleted or Prominent 24-30 25Y 53 9 7.5YR 60 6 C PL Smidy Cay Take Gavet Deleted or Prominent 24-30 25Y 53 9 7.5YR 60 6 C PL Smidy Cay Take Gavet Deleted or Prominent 24-30 25Y 53 5 C PL Deleted or Prominent Deleted or Prominent 25Y 53 5 C PL Deleted or Prominent Indicators for Problematic Hydre Solif*: Type: C = Concentration, D = Depletion, RM = Reduced Matrix (S1) Smidy Redux (S3) Coast Praine Redux (Hydre Solif*:	Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
(Inches) Color (moist) % Color (moist) % Type* Loc* Texture Remarks 0-24 10YR 211 100 7.5YR 5% 5 C PL Sindy Clay Taxe Gravel Distance of Prominent 24-30 2.5Y 5% 5 C PL Sindy Clay Taxe Gravel Distance of Prominent 24-30 2.5Y 5% 5 C PL Sindy Clay Taxe Gravel Distance of Prominent 24-30 2.5Y 5% 5 C PL Sindy Clay Taxe Gravel Distance of Prominent 24-30 2.5Y 5% 5 C PL Sindy Clay Taxe Gravel Distance of Prominent 1	Depth	Matrix		Re	dox Feat	tures			
0-24 1078 211 100 Clay Clay 24-30 2.5Y 53 90 7.5YR 56 5 C PL Standy Clay Take Gravel Destind or Prominent 1 2.5Y 53 90 7.5YR 56 5 C PL Destind or Prominent 1 1 2.6Y 68 5 C PL Destind or Prominent 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td></td> <td>Color (moist)</td> <td>%</td> <td>Color (moist)</td> <td>%</td> <td>Tvpe*</td> <td>Loc**</td> <td>Texture</td> <td>Remarks</td>		Color (moist)	%	Color (moist)	%	Tvpe*	Loc**	Texture	Remarks
24-30 2.5Y 5.0 90 7.5YR 5.6 5 C PL Sandy Clay Trace Grave Distinct or Prominent	0-24	, ,	100			51		Clay	
Image: Statistic Layer (A) S C PL Distinct or Prominent Image: Statistic Layer (A) Image: Statisti						_		-	
Image: Secondary Indicators: "Image: Secondary Indicators: Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Image: Secondary Indicators: Hydric Soll Indicators:: Indicators for Problematic Hydric Solls": Hydric Soll Indicators:: Indicators (SP) Black Histic (A3) Stripped Matrix (S6) Black Histic (A3) Stripped Matrix (S6) Branding Layers (A5) Loamy Glayed Matrix (F2) Other (explain in remarks) Depleted Meson Dark Surface (TF12) Strington Layers (A5) Loamy Glayed Matrix (F2) Depleted Below Dark Surface (A1) Redox Dark Surface (F7) Thrick Lax Surface (A12) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Redox Dapressions (F8) Type: model to the second (S1) Type: Hydric Soil Present? No Aquatic Fauna (B13) Surface Water (A11) Aquatic Fauna (B13) Surface Sol Cracks (B6) Drak Surface (B1) Price Table (A2) True Aquate Plants (B14) Drainage Paterns (B10) Surface Water (A11) Aquatic Fauna (B13) Surface Sol Cracks (B6) Tupe Cause Patric Plants (B14) Drainage Paterns (B10) Drainage Pa	24-30	2.5Y 5/3	90	7.5YR 5/6	5	С	PL	Sandy Clay Trace Gravel	Distinct or Prominent
Hydric Soil Indicators:				2.5Y 6/8	5	С	PL		Distinct or Prominent
Hydric Soil Indicators:									
Hydric Soil Indicators:									
Hydric Soil Indicators:									
Hydric Soil Indicators:									
Hydric Soil Indicators:									
Hydric Soli Indicators:									
Hydric Soli Indicators:	*Type: C =	Concentration D	= Deple	tion_RM = Redu	iced Mati	rix MS =	Masked	Sand Grains **I ocatio	on: PL = Pore Lining M = Matrix
Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) (LRR K, L, R) Histo Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L, R) Black Histic (A3) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Other Surface (F12) (LRR K, L, R) Yery Shallow Dark Surface (A11) Depleted Matrix (F2) Other (explain in remarks) Other (explain in remarks) Depleted Below Dark Surface (A12) Depleted Dark Surface (F6) Trick Dark Surface (A12) Depleted Dark Surface (F7) Thick Dark Surface (A12) Depleted Dark Surface (F7) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric Soil Present? No Surface Water (A1) Aquatic Flants (B13) Surface Soil Cracks (B6) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Flants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidzed Rhizospheres on Living Surface Water (A1) Adgal Mat or Crust (B4)	<u>,</u>		Dopie		lood mat	ix, me	mached		-
Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L) Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) Depleted Below Dark Surface (A12) Bepleted Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Depressions (F8) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric Soil Present? No Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) True Aquatic Plants (B14) Surface Water (A1) Aquatic Rauna (B13) Surface Soil Cracks (B6) Crackis (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Doxidzed Rhizospheres on Living Crackis (B6) Secondary Indicators (minimum of two required) Restrictive Advect (C3) Surface Water Table (C2) Crackis (B6) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Crackis (B6) Crackis (B6) Surface Water (A2) T	-			Sa	ndv Glev	ed Matrix	(S4)		•
Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, R) Hydrogen Sulfide (A4) Learny Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Learny Gleyed Matrix (F3) Other (explain in remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric Soil Present? No Depleted Metrix (F3) Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Plants (B14) Drainage Patterns (B10) Surface Water (A1) Aquatic Plants (B14) Drainage Patterns (B10) Surface Water (A1) Aquatic Plants (B14) Drainage Patterns (B10) Surface Water (A1) Aquatic Plants (B14) Drainage Patterns (B10) Surface Soil Cracks (B6) Hydrogen Suffade Othic (C3) Surface Soil Cracks (B6) Surface Soil Cracks (B2) Rost C3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Sufface R1) Oxidized Rhizospheres on Living Crarkins Humayr (C3) Surface Soil Cracks (B6) Mater Matris (B1) Oxidized Rhizospheres o		()					(04)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Sandy Mucky Mineral (S1) Redox Depressions (F8) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (If observed): Type: Muck Year OP eat (S3) Remarks: HYDROLOGY Hydric Soil Present? No Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Water Marks (B1) Oxidicad Rhizospheres on Living Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Roots (C3) Saturation on Tilled Soils Yease Plants (D1) May Mark Or Cust (B4) Recent Iron Reduction in Tilled Soils Yease Soil Cracks (B6) Saturation Visible on Aerial Imagery (C9)<		,			-				
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) 2 cm Muck (A10) Depleted Matrix (F3) Image: Comparison of the co		()	4)		• •	• •	N (E1)		()())
2 cm Muck (A10) Depleted Matrix (F3) Depleted Blow Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) * Sond Mucky Mineral (S1) Redox Depressions (F8) Pype: Public Soil Present? No No Performance Secondary Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Surface Water (A1) Aquatic Plants (B14) Dirainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Saturation Visible on Aerial Imagery (C9) Ohit Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Thin Muck Surface (C7) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) In Deposits (B5) (C6) Gauge or Well Data (D9) Wetland Hydrology <	*	0	,		•	•	. ,		(,
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed):		•)				(Г2)		Temarks)
Thick Dark Surface (A12) Depleted Dark Surface (F7) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric Soil Present? No Depth (inches):		()	Curfoo						
Sandy Mucky Mineral (S1) Redox Depressions (F8) Indicators (Nyclopid) vegetation and vegation and ve				· · · <u> </u>			· /		
		· · · · ·	,	'	•		` '		
Restrictive Layer (if observed):			. ,		dox Depi	essions ((F8)		esent, unless disturbed or
Type:	50	m Mucky Peat or	Peat (S	3)				P	
Depth (inches):	Restrictive L	ayer (if observed	l):						
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Carafish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6)	Туре:					-		Hydric Soil Presen	t? <u>No</u>
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunet or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Positin (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Other (Explain in Remarks) Wetland Hydrology Field Observations: Yes No X Depth (inches): Wetland Hydrology Vater Table Present? Yes No X Depth (inches): Yes Yes	Depth (inches	s):				-			
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunet or Stressed Plants (D1) Adjal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Positin (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Other (Explain in Remarks) Wetland Hydrology Field Observations: Yes No X Depth (inches): Wetland Hydrology Vater Table Present? Yes No X Depth (inches): Yes Yes	Remarks:								
Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Inon Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Surface Water Present? Yes No X Depth (inches): Sufface Water Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Yes Yes Saturation Prese	rtemanto.								
Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Inon Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Surface Water Present? Yes No X Depth (inches): Sufface Water Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Yes Yes Saturation Prese									
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Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Yes Yes (includes capillary fringe) Depth (inches): Yes Yes Yes Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Yes Yes				equired: check a	II that ap	(vla		Secondary Indica	ators (minimum of two required)
High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Vettand Hydrology Water Table Present? Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Yes Saturation Present? Yes No X Depth (inches): Yes Yes Saturation Present? Yes No X Depth (inches): Yes Yes Saturation Present? Yes No X Depth (inches): </td <td>-</td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td> <td></td> <td></td> <td>(13)</td> <td></td> <td></td>	-	· · · · · · · · · · · · · · · · · · ·					(13)		
Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Saturation Present? Yes No X Depth (inches): Yes No X Depth (inches): Yes Saturation Present? Yes No X Dept					•				
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Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Other (Explain in Remarks) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Yes Saturation Present? Yes No X Depth (inches): Yes Saturation Present? Yes No X Depth (inches): Yes Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Yes									
Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Feld Observations: Water-Stained Leaves (B9) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Yes Saturation Present? Yes No X Depth (inches): Yes (includes capillary fringe) Depth (aerial photos, previous inspections), if available: Yes		()							
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations:							uced Iron		••••
Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations:					•			· · ·	
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations:									
Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations:			rial Imag	ery (B7)	• • • •	ick Surfac	ce (C7)		
Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes Water Table Present? Yes No X Depth (inches): Present? Yes Yes Saturation Present? Yes No X Depth (inches): Present? Yes Yes (includes capillary fringe) No X Depth (inches): Yes Yes Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Yes Yes									
Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Present? Present? Saturation Present? Yes No X Depth (inches): Present? Yes (includes capillary fringe) No X Depth (inches): Yes Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Yes Yes	Water-	Stained Leaves (E	39)		-			6)	
Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Present? Present? Saturation Present? Yes No X Depth (inches): Present? Yes (includes capillary fringe) No X Depth (inches): Yes Yes Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Yes Yes		`				•		- 	
Water Table Present? Yes No X Depth (inches): Wetland Hydrology Present? Present? Saturation Present? Yes No X Depth (inches): Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Yes			Yes	No	х	Depth (ii	nches):		
Saturation Present? Yes No X Depth (inches): Present? Yes (includes capillary fringe)						-		We	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
							·		
Remarks:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks:									
Remarks:									
	Remarks:								













TET TET

Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500



Feature ID: NWB100

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- —— Index
- ----- Intermediate



TETRA TECH

Aerial Photograph Review

Drojoct/Sito:	WET Lake Cl				A FORM Mar		•	ato:	10/26/2022	
Project/Site: Applicant/Owner:		Lake Charlotte Sc		County:	State:	MN	Sampling D Sampling P		NWB101A	
Investigator(s):		Susan Mayer		Sec	tion, Townsh				03N R30W	
Landform (hillslope, terra		Hillslop	00		relief (conca				Convex	
Slope (%): 1	. ,	43.71398	pe	Long:	-94.44		Datum:		WGS84	
Soil Map Unit Name:			elonee	Long.		VI Classific			NA	
Are climatic/hydrologic c				of the year?				(0)		
				-			normal circu		oresent? No	
		, or hydrology		-	y disturbed?					
Are vegetation SUMMARY OF FIN		, or hydrology		naturally pi	roblematic?	(II ne	eded, expla	am any an	swers in remarks.)	
Hydrophytic Veget	ation Present	? No								
Hydric Soil Presen	t?	No		Is the s	sampled are	ea within a	wetland?		No	
Wetland Hydrology	/ Present?	No		lf yes, o	optional wetl	and site ID:				
Remarks: Recently harvested a	agricultural fie	ald.								
VEGETATION U	se scientifi	c names of pla	ants.							
<u>Tree Stratum</u> 1.	(Plot size:			Dominant Species	Indicator Status	Numbe	er of Dominar e OBL, FACV	nt Species	t 0 (A)	
3						Total N	lumber of Do s Across All	minant	0 (B)	
4 5				=Total Cov	er		nt of Dominar e OBL, FACV		% (A/B)	
Sapling/Shrub Stratum	(Plot size:) –		-10101 001	01	Preva	lence Index	Workshe	et	
1.	(/					% Cover of:		fultiply by:	
2.						OBL	species	x 1 :		
3.						FACV	V species	x 2 :	=	
4.						FAC s	species		=	
5.						FACU	l species		=	
		-		=Total Cov	er	UPL s	species	x 5 =	=	
<u>Herb Stratum</u> 1 2.	(Plot size:)					nn totals	(A) = B/A =	(B)	
3						Hydro	ophytic Veg	etation Ind	licators:	
4							Rapid test for	or hydrophy	tic vegetation	
5							Dominance	test is >50	%	
6							Prevalence	index is ≤3	.0*	
7									ons* (provide	
8									harks or on a	
9							separate sh			
10								hydrophyt	c vegetation*	
Woody Vine Stratum 1.	(Plot size:)		=Total Cov	er	*Indicato	(explain) ors of hydric so unless distur		nd hydrology must be ematic	
2.				=Total Cov	er	Veg	drophytic getation sent?	<u>No</u>		
Remarks: (Include photo Harvested agricultural fi			te sheet)							

NWB101A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-19	10YR 2/1	100					Clay	
19-21	2.5Y 3/1	90	2.5Y 5/3	9	С	PL/M	Clay	Distinct or Prominent
19-21	2.51 3/1	90		-			Ciay	
			7.5YR 5/6	1	С	PL		Distinct or Prominent
21-30	2.5Y 5/3	80	7.5YR 5/6	2	С	PL	Clay	
	10YR 2/1	18						Mixed Matrix
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	tosol (A1)				ed Matrix	(S4)		dox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S7	7) (LRR K, L)
Bla	ick Histic (A3)		Stri	ipped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)		•	ky Minera	. ,	Very Shallow Da	rk Surface (TF12)
Str	atified Layers (A5)	Loa	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)
	m Muck (A10)			pleted M	atrix (F3)			
	pleted Below Darl		e (A11) Re	dox Dark	Surface	(F6)		
Thi	ck Dark Surface ((A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydropl	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Re	dox Depi	ressions ((F8)	, , ,	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive La	ayer (if observed	l):						
Туре:							Hydric Soil Presen	t? No
Depth (inches):				-			
Demerler					-			
Remarks:								
HYDROLO	<u>2</u> Y							
	rology Indicators							
-	ators (minimum of		equired: check a	II that an	(vla		Secondary Indica	ators (minimum of two required)
	e Water (A1)	0110-15-1	equired, check a		Fauna (B	12)	-	
	. ,					,		Soil Cracks (B6)
0	ater Table (A2)				uatic Plai	. ,		e Patterns (B10)
	ion (A3) Varks (B1)				en Sulfide		· ·	son Water Table (C2) Burrows (C8)
	ent Deposits (B2)			Roots (d Rhizosp			on Visible on Aerial Imagery (C9)
	eposits (B3)				ce of Red	uced Iron		or Stressed Plants (D1)
	lat or Crust (B4)			•			· · /	phic Position (D2)
-	posits (B5)			(C6)			·	utral Test (D5)
	tion Visible on Ae	rial Imag	gery (B7)	-	ick Surfac	ce (C7)		· · /
Sparse	ly Vegetated Con	cave St	Irface (B8)	Gauge	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	3)	
Field Observ	ations:							
Surface Wate		Yes	No	Х	Depth (i	nches):		
Water Table F	Present?	Yes	No	Х	Depth (i	· _	We	tland Hydrology Present?
Saturation Pre	esent?	Yes	No	Х	Depth (i	nches):		No No
(includes capi	llary fringe)							
Describe Reco	orded Data (strea	m gauge	e, monitoring wel	l, aerial p	photos, pr	revious in	spections), if available:	
Remarks:								





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWB101

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WETLAND DETERMIN	NATION DATA F City/County:	ORM - Midwes Martin	t Region Sampling Date:	10/26/2022
Applicant/Owner:	Lake Charlotte Solar,	· · · · · · · · · · · · · · · · · · ·	tate: MN	Sampling Point:	NWB103A
Investigator(s):	Susan Mayer		Township, Range:		103N R30W
Landform (hillslope, terrace,		<u>_</u>	ef (concave, convex		Concave
	Lat: 43.72243	Long:	-94.45486	Datum:	WGS84
	msrud-Storden complex, 10 to	U			
Soli Map Unit Name: <u>m</u>	oderately eroded		NWI Classifica		NA
	itions of the site typical for this			ain in remarks)	
Are vegetation X,		Significantly dis		normal circumstances	·
• <u> </u>	soil, or hydrology	naturally proble	ematic? (If ne	eded, explain any ar	swers in remarks.)
SUMMARY OF FINDI					
Hydrophytic Vegetatior	Present? No				
Hydric Soil Present?	Yes	Is the sam	pled area within a	wetland?	No
Wetland Hydrology Pre	esent? No	If yes, optio	nal wetland site ID:		
Remarks:					
Recently harvested agric	ultural field.				
VEGETATION Use	scientific names of plants				
Tree Stratum (Plot		olute Dominant Ir Cover Species		nance Test Workshee	H.
1	Size) %C	Jovel Species		er of Dominant Species e OBL, FACW, or FAC:	(A)
2 3				lumber of Dominant s Across All Strata:	(B)
4 5			Percen that are	t of Dominant Species e OBL, FACW, or FAC:	% (A/B)
		=Total Cover		, , , ,	
Sapling/Shrub Stratum (Plot size:)		Preva	lence Index Worksho	eet
1					Multiply by:
2				species x 1	
3				/ species x 2	
4				species x 3	
5		=Total Cover		species x 4 species x 5	
Herb Stratum (Plot size:)			nn totals (A	
1.	,			lence Index = B/A =	/(-)
2.					
3.			Hydro	phytic Vegetation In	dicators:
4.				Rapid test for hydroph	ytic vegetation
5				Dominance test is >50)%
6				Prevalence index is ≤	
7				Morphological adapta	
8				supporting data in Rei	marks or on a
9 10				separate sheet) Problematic hydrophy	tic vegetation*
10		=Total Cover		(explain)	
	Plot size:)		*Indicato	ors of hydric soil and wetla unless disturbed or probl	
2				Irophytic	
		=Total Cover		jetation sent? <u>No</u>	
Remarks: (Include photo nur Harvested agricultural field.	mbers here or on a separate sh Bare ground: 100%	leet)			

NWB103A

Depth	Matrix	Matrix		edox Fea	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Text	ure	Remarks
0-40	10YR 2/1	100					Sandy Clay T	race Gravel	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Ma	trix, MS =	Masked S	Sand Grains.	**Locatio	on: PL = Pore Lining, M = Ma
Hydric Soil									ematic Hydric Soils*:
•	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)			dox (A16) (LRR K, L, R)
	stic Epipedon (A2))		ndy Red		()			7) (LRR K, L)
	ack Histic (A3)	/		-	atrix (S6)				Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	4)		• •	cky Minera	d (F1)		-	irk Surface (TF12)
	ratified Layers (A5	,		-	yed Matrix			r (explain in	
	cm Muck (A10)	')		•	latrix (F3)	. ()			
	pleted Below Dar	k Surfac			k Surface	(E6)			
	ick Dark Surface		· · · · ·		ark Surface				
				•		. ,			hytic vegetation and wetland
	indy Mucky Miner	. ,		dox Dep	oressions (F8)	problema		esent, unless disturbed or
50	cm Mucky Peat or	Peat (S	3)				F		
estrictive L	ayer (if observed	d):							
уре:					_		Hydric	Soil Presen	nt? Yes
Depth (inches	<u>, </u>				-		Hydric \$	Soil Presen	nt? Yes_
Depth (inches Remarks: A12 Assume	d				-		Hydric S	Soil Presen	nt? <u>Yes</u>
Depth (inches Remarks: A12 Assumed	d GY	 			-		Hydric S	Soil Presen	nt? <u>Yes</u>
Pepth (inches Remarks: A12 Assumed IYDROLO Vetland Hyd	d GY Irology Indicator:		equired: check a	all that at	_ 				
epth (inches emarks: A12 Assumer IYDROLO /etland Hyd rimary Indica	d GY irology Indicators ators (minimum of		equired; check a			13)		ndary Indica	ators (minimum of two require
Depth (inches Remarks: A12 Assumed IYDROLO Vetland Hyd Yrimary Indica Surfact	d GY Irology Indicator: ators (minimum of e Water (A1)		equired; check a	Aquatio	Fauna (B			ndary Indica	ators (minimum of two require Soil Cracks (B6)
Pepth (inches Remarks: A12 Assumed A12 Assumed A14 Ass	d GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; check a	Aquatio	: Fauna (B quatic Plar	nts (B14)	<u>Seco</u>	ndary Indica Surface	ators (minimum of two require Soil Cracks (B6) e Patterns (B10)
Vepth (inches Remarks: A12 Assumed IYDROLO Vetland Hyd Vetland Hyd Vetland Hyd Surfacd High W Satura	d GY Irology Indicator ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		equired; check a	Aquatio True Ao Hydrog	: Fauna (B quatic Plar en Sulfide	nts (B14) Odor (C	<u>Seco</u> - 1) _	ndary Indica Surface Drainage Dry-Sea	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2)
Pepth (inches Remarks: A12 Assumed A12 Assumed A12 Assumed A12 Assumed A12 Assumed A12 Assumed Vetland Hyd Satura Satura Water	d GY irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired; check a	Aquatic True Ac Hydrog Oxidize	: Fauna (B quatic Plar en Sulfide ed Rhizosp	nts (B14) Odor (C	<u>Seco</u> - 1) _	ndary Indica Surface Drainage Dry-Sea Crayfish	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8)
Pepth (inches Remarks: A12 Assumed IYDROLO Vetland Hyd Vetland Hyd Vetland Hyd Satura Satura Water Sedime	d GY irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; check a	Aquatio True Ao Hydrog Oxidize Roots (: Fauna (B quatic Plar en Sulfide ed Rhizosp C3)	nts (B14) Odor (C oheres on	<u>Seco</u> - 1) - Living -	ndary Indica Surface Drainage Try-Sea Crayfish Saturatio	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (
Pepth (inches Remarks: A12 Assumed IYDROLO Vetland Hyd Vetland Hyd Vetland Hyd Satura Satura Satura Satura Drift De	d GY rology Indicator ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; check a	Aquatic True Ac Hydrog Oxidize Roots (Presen	Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu	nts (B14) Odor (C wheres on	Seco - 1) _ Living _ (C4) _	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatio Stunted	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1)
Pepth (inches Remarks: A12 Assumed A12 Assumed A12 Assumed A12 Assumed Algal M Mater Drift De Algal M	d GY rology Indicator : ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)		equired; check a	Aquation True Act Hydrog Oxidize Roots (Present Recent	Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu	nts (B14) Odor (C wheres on	Seco - 1) _ Living _ (C4) _	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1) phic Position (D2)
Depth (inches Remarks: A12 Assumed A12 Assumed A12 Assumed Alter A Vetland Hyd Primary Indica Surface Brimary Indica Satura Satura Satura Drift De Algal M Iron De	d GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	<u>one is r</u>		Aquatic True Ad Hydrog Oxidize Roots (Presen Recent (C6)	E Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T	Seco - 1) _ Living _ (C4) _	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1)
Pepth (inches Remarks: A12 Assumed IYDROLOG Vetland Hyd Vetland Hyd Vetland Hyd Vetland Hyd Vater High W Satura Sedime Orift De Algal M Iron De Inunda	d GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae	<u>i one is r</u> rial Ima	 gery (B7)	Aquatic True Ac Hydrog Oxidize Roots (Presen Recent (C6) Thin M	E Fauna (B quatic Plar en Sulfide ed Rhizosp C3) Ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Seco - 1) _ Living _ (C4) _	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	ators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1) phic Position (D2)
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LIBBY



Feature ID: NWB103

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	Lake Charlotte	City/County:		•	10/26/2022
Applicant/Owner:	Lake Charlot		State:	MN Sampling Point	: NWB104A
nvestigator(s):	Susan Mayer		Section, Township	o, Range: Seo	2.17 T103N R30W
andform (hillslope, terrace,	etc.):	Swale Lo	ocal relief (concav	/e, convex, none):	Concave
Slope (%): 6	Lat: 43.72	298 Long:	-94.453	75 Datum:	WGS84
		ex, 10 to 16 percent slo	opes, NW	I Classification:	NA
<u>m</u> Are climatic/hydrologic cond	oderately eroded	I for this time of the ve		If no, explain in remarks)	
Are vegetation X ,		-	antly disturbed?	Are "normal circumst	ances present? No
	soil , or hydrol		y problematic?		any answers in remarks.)
SUMMARY OF FINDIN			y problematic:	(ii needed, explain a	
Hydrophytic Vegetation		0			
Hydric Soil Present?	N	o isti	he sampled area	within a wetland?	Νο
Wetland Hydrology Pre	esent? Ye		s, optional wetla		
Remarks:					
Recently tilled agricultural	field. Recently harve	ested agricultural field.			
/EGETATION Use s	scientific names o	f plants.			
		Absolute Domina	ant Indicator	Dominance Test Wo	rksheet
1	size:)	% Cover Specie		Number of Dominant Sp that are OBL, FACW, or	
2 3				Total Number of Domin Species Across All Stra	
4 5				Percent of Dominant Sp that are OBL, FACW, or	
		=Total 0	Cover	.	
、	Plot size:)		Prevalence Index We	
1 2.				Total % Cover of: OBL species	Multiply by: x 1 =
3.				FACW species	x 2 =
4.				FAC species	x 3 =
5.				FACU species	x 4 =
		=Total 0	Cover	UPL species	x 5 =
Herb Stratum (I	Plot size:)		Column totals	(A) (B)
1				Prevalence Index = B	/A =
2				Lludronhutio Vogoto	lien Indicatoro.
3 4				Hydrophytic Vegetar	vdrophytic vegetation
5.				Dominance test	
6.				Prevalence inde	
7					daptations* (provide
8.				supporting data	in Remarks or on a
9.				separate sheet)	
10				Problematic hyd	Irophytic vegetation*
		=Total 0	Cover	(explain)	
Woody Vine Stratum (I	Plot size:			*Indicators of hydric soil an present, unless disturbed	nd wetland hydrology must be or problematic
2			Cover	Hydrophytic Vegetation	

NWB104A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	ures			-
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10YR 2/1	100		70	Type	200		
							Clay	
8-14	2.5Y 5/3	93	2.5Y 6/6	7	С	PL	Clay	Distinct or Prominent
14-16	2.5Y 5/2	90	2.5Y 6/6	5	С	PL	Clay	Distinct or Prominent
			2.5Y 8/1	5	D	М		
				-				
-								
*Tupo: C =	Concentration, D	- Dople	tion PM - Podu	ood Mat	iv MS -	Maakad	Sand Craina **Lagatic	Don: PL = Pore Lining, M = Matrix
<i>.</i>		- Depie	elion, Rivi – Redu	ced Mati	IX, IVIS –	waskeu		
Hydric Soil			C o	du Clau	od Motrix	(64)		ematic Hydric Soils*:
	tosol (A1)			• •	ed Matrix	(54)		dox (A16) (LRR K, L, R)
	tic Epipedon (A2)			ndy Redo			Dark Surface (S7	
	ick Histic (A3)			••	atrix (S6)		·	Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	,		•	ky Minera	. ,		rk Surface (TF12)
	atified Layers (A5)			ed Matrix	(F2)	Other (explain in	remarks)
	m Muck (A10)			oleted Ma	atrix (F3)			
De	pleted Below Darl	< Surfac	e (A11) Ree	dox Dark	Surface	(F6)		
Thi	ck Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydropl	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Ree	dox Depr	ressions (F8)		esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive L	ayer (if observed).						
Type:		<i>.</i>					Hydric Soil Presen	t? No
Depth (inches).				-			
					-			
Remarks:								
HYDROLO	GY							
Wetland Hyd	rology Indicators	5:						
Primary Indica	ators (minimum of	one is r	equired; check a	ll that ap	<u>ply)</u>		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)
High W	ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)
Saturat	ion (A3)				en Sulfide			son Water Table (C2)
	Marks (B1)				d Rhizosp			Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0			· _ ·	on Visible on Aerial Imagery (C9)
	eposits (B3)				e of Red	uced Iron		or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in ⁻	Tilled Soils X Geomor	phic Position (D2)
Iron De	posits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparse	ly Vegetated Con	cave Su	Irface (B8)	Gauge o	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	3)	
Field Observa	ations:							
Surface Water		Yes	No	Х	Depth (ii	nches):		
Water Table F		Yes	No	X	Depth (ii		We	etland Hydrology
Saturation Pre	esent?	Yes	No	Х	Depth (ii			Present? Yes
(includes capi	llary fringe)		·			·		
		m gauge	e, monitoring wel	l, aerial p	photos, pr	evious in	spections), if available:	
		-						
Remarks:								







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2013













TETRA TECH

	WET	LAND DETER	RMINATI	ON DATA	FORM -	Midwes	t Regior	า		
Project/Site:	Lake Cl	harlotte	City/	County:	Marti	n	Sampling	Date:	10/26/2	022
Applicant/Owner:		Lake Charlotte Se	olar, LLC		State:	MN	Sampling I	Point:	NWB10	06A
Investigator(s):		Susan Mayer		Sectio	on, Townshi	p, Range:		Sec.17 T1	03N R30	N
Landform (hillslope, terrace	e, etc.):	Hillslo	ре	Local r	elief (conca	ve, convex	, none):		Convex	
Slope (%): 3	Lat:	43.72162		Long:	-94.453	324	Datum:		WGS84	
Soil Map Unit Name:	Canisteo-(Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA	
Are climatic/hydrologic con	ditions of	the site typical for	this time c	of the year?	Yes (If no, expla	ain in rema	rks)		
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	present?	No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expl	lain any an	swers in	remarks.)
SUMMARY OF FIND	INGS									
Hydrophytic Vegetation	on Present	t? No								
Hydric Soil Present?		No		Is the sa	mpled area	a within a	wetland?		No	
Wetland Hydrology P	resent?	No		If yes, op	otional wetla	nd site ID:				
Remarks:										
Recently tilled agricultura		-	0	al field.						
VEGETATION Use	scientifi	•		<u> </u>		·				
Tree Stratum (Plo	ot oizo:)	% Cover	Dominant	Indicator	Domir	nance Test	Workshee	λ τ	
1. (Pic	ot size:)	% Cover	Species	Status		er of Domina		0	(A)
2						that are	e OBL, FAC	VV, or FAC:	0	(A)
3.							lumber of D s Across All		0	(B)
4 5.							nt of Domina e OBL, FAC		%	(A/B)
···				=Total Cove	r		UDL, FAC	W, OFAC.		(,,,,,)
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Inde	x Workshe	et	
1.						Total	% Cover of	: 1	Multiply by	/:
2.						OBLs	species	x 1	=	
3.						FACV	v species	x 2	=	
4							species		=	
5							species _		=	
		, -		=Total Cove	r		pecies	x 5	-	(E)
Herb Stratum	(Plot size:)					nn totals	(A)	·	(B)
1						Preva	lence Index	c = B/A = -		
2 3.						Hydra	anhytic Vo	getation In	dicators	
3 4								for hydroph		ation
5							•	e test is >50		
6							Prevalence	e index is ≤3	3.0*	
7.							Morphologi	ical adaptat	ions* (pro	vide
8.							supporting	data in Rer	narks or o	na
9							separate sł	neet)		
10							Problemati	c hydrophy	ic vegetat	ion*
				=Total Cove	r		(explain)			
1)						soil and wetla rbed or probl		gy must be
2		-		=Total Cove	r	Veg	drophytic getation sent?	<u>No</u>		
Remarks: (Include photo n Recently tilled agricultural f			te sheet)							

NWB106A

Depth <u>Matrix</u>				Redox Fe	<u>atures</u>						
(Inches)	Color (moist)	%	Color (moist) %	Type*	Loc**	Text	ure	Remarks		
0-10	10YR 2/1	100		, ,,	.,,,,,		Cla		. terrisine		
				_							
10-20	10YR 2/1	50					Cla	ау			
	2.5Y 5/3	50							Mixed Matrix		
				-							
				-							
	Concentration, D	= Deple	etion, RM = Re	duced M	atrix, MS =	Masked \$			n: PL = Pore Lining, M = Matrix		
Hydric Soil									matic Hydric Soils*:		
	stosol (A1)			-	eyed Matrix	(S4)			dox (A16) (LRR K, L, R)		
His	stic Epipedon (A2)			andy Re	dox (S5)		Dark	Surface (S7	') (LRR K, L)		
Bla	ack Histic (A3)		ę	stripped N	Aatrix (S6)		Iron-I	Manganese	Masses (F12) (LRR K, L, R)		
Hy	drogen Sulfide (A	4)	I	oamy Mu	icky Minera	al (F1)	Very	Shallow Dar	rk Surface (TF12)		
St	ratified Layers (A5)	I	oamy Gl	eyed Matrix	(F2)	Othe	r (explain in	remarks)		
	cm Muck (A10)			•	J Matrix (F3)	-					
	pleted Below Darl	c Surfac			rk Surface	(F6)					
	ick Dark Surface (· · ·		Dark Surfac	. ,	** ** *				
	indy Mucky Minera				pressions (ytic vegetation and wetland esent, unless disturbed or		
		. ,			pressions ((го)	problemat		esent, unless disturbed of		
	cm Mucky Peat or	Peal (S	3)			1	•				
lestrictive L	ayer (if observed):									
ype:							Hydric \$	Soil Presen	t? <u>No</u>		
Type: Depth (inches Remarks:	s):						Hydric \$	Soil Presen	t? <u>No</u>		
Depth (inches							Hydric \$	Soil Presen	t? <u>No</u>		
Depth (inches Remarks:	GY						Hydric S	Soil Presen	t? <u>No</u>		
Depth (inches Remarks: HYDROLO Vetland Hyd	GY Irology Indicators		equired: chec	all that a							
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indic	GY Irology Indicators ators (minimum of		equired; chec			313)		ndary Indica	tors (minimum of two required)		
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac	GY Irology Indicators ators (minimum of e Water (A1)		equired; chec	Aquat	c Fauna (B		Seco	ndary Indica	tors (minimum of two required) Soil Cracks (B6)		
Depth (inches Remarks: IYDROLO Vetland Hyd Primary Indic Surfac High V	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; chec	Aquat	c Fauna (B Aquatic Plai	nts (B14)	<u>Seco</u>	ndary Indica Surface \$ Drainage	tors (minimum of two required) Soil Cracks (B6) ₽ Patterns (B10)		
Pepth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High V Satura	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		equired; chec	Aquat True A Hydro	c Fauna (B Aquatic Plai gen Sulfide	nts (B14) Odor (C	<u>Seco</u> - 1) _	ndary Indica Surface S Drainage Dry-Seas	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2)		
Pepth (inches Remarks: AYDROLO Vetland Hyd Primary Indic Surfac High V Satura Water	GY Irology Indicators <u>ators (minimum of</u> e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired; chec	Aquat True A Hydro Oxidiz	c Fauna (B Aquatic Plai gen Sulfide ed Rhizosp	nts (B14) Odor (C	<u>Seco</u> - 1) _	ndary Indica Surface S Drainage Dry-Seas Crayfish	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)		
Pepth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; chec 	Aquat True A Hydro Oxidiz Roots	c Fauna (B Aquatic Plan gen Sulfide ed Rhizosp (C3)	nts (B14) Odor (C oheres on	<u>Seco</u> - 1) _ Living _	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatio	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C8		
Pepth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Satura Satura Control Sedim Drift D	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; chec	Aquat True A Hydro Oxidiz Roots Prese	c Fauna (B Aquatic Plan gen Sulfide ed Rhizosp (C3) nce of Redu	nts (B14) Odor (C oheres on uced Iron	<u>Seco</u> - 1) I Living (C4)	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (CS or Stressed Plants (D1)		
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Pepth (inches Remarks: Remarks: Remarks: Remarks: Primary Indic: Surfac Surfac High V Satura Satura Satura Drift D Algal M Iron Do	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	one is r	- - - -	Aquat True / Hydro Oxidiz Roots Prese Recer (C6)	c Fauna (B oquatic Plan gen Sulfide ed Rhizosp (C3) nce of Redu t Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T	<u>Seco</u> - 1) I Living (C4)	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (CS or Stressed Plants (D1)		
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Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:2,000





Feature ID: NWB106

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Regior	า		
Project/Site:	Lake C	harlotte	City/	County:	Mart	in	Sampling	Date:	10/26/	2022
Applicant/Owner:		Lake Charlotte S	olar, LLC		State:	MN	Sampling	Point:	NWB1	107A
Investigator(s):		Susan Mayer		Sectio	on, Townsh	ip, Range:		Sec.17 T	103N R30	WC
Landform (hillslope, terrac	;e, etc.):	Hillslo	pe	Local r	elief (conca	ive, conve	k, none):		Convex	
Slope (%): 4	Lat:	43.71748		Long:	-94.45	586	Datum:		WGS84	
Soil Map Unit Name:	Canisteo-	Glencoe complex,	0 to 2 per	cent slopes	NW	/I Classific	ation:		NA	
Are climatic/hydrologic co	nditions of	the site typical for	this time c	of the year?	Yes	(If no, expl	ain in rema	rks)		
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	present?	P No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, exp	lain any ar	nswers in	remarks.)
SUMMARY OF FIND	INGS									
Hydrophytic Vegetati	ion Presen	t? No								
Hydric Soil Present?		No		Is the sa	mpled are	a within a	wetland?		No	
Wetland Hydrology F	Present?	No		If yes, op	tional wetla	and site ID	:			
Remarks:										
Recently tilled agricultur			Ū.	al field.						
VEGETATION Use	e scientif	ic names of pla		Deminent	la di satan	Dami		Markaka	-1	
Tree Stratum (P	lot size:)	% Cover	Dominant Species	Indicator Status	Domi	nance Test	worksne	et	
<u>1.</u>)	78 COVEI	Opecies	Status		er of Domina		0	(A)
2							e OBL, FAC			(//)
3.							Number of D es Across Al		0	(B)
4 5.							nt of Domina		%	(A/B)
J				=Total Cove	r	that an	e OBL, FAC	W, OF FAC:		_ (/// D)
Sapling/Shrub Stratum	(Plot size:	·)				Preva	alence Inde	x Worksh	eet	
1.	·	,				Total	% Cover of	-	Multiply b	by:
2.						OBL	species	x 1	=	
3.						FACV	V species	x 2	=	
4.						FAC s	species		=	
5							J species	x 4	=	
				=Total Cove	r		species	x 5		
Herb Stratum	(Plot size:)					nn totals	(A	.)	(B)
1						Preva	lence Inde	x = B/A =		
						Llseda	anhutia Va	actotion In	diastara	
3 4							phytic Ve Rapid test	-		
5							Dominance			
6							Prevalence			
7.							Morpholog	ical adapta	tions* (pr	ovide
8.							supporting	data in Re	marks or	on a
9.							separate s	heet)		
10							Problemati	c hydrophy	tic vegeta	ation*
				=Total Cove	r		(explain)			
Woody Vine Stratum 1.)					ors of hydric unless distu			ogy must be
2				=Total Cove	r	Veç	drophytic getation sent?	<u>No</u>		
2 Remarks: (Include photo r Recently tilled agricultural	numbers he	ere or on a separa		=Total Cove	r	Veç	getation	<u>No</u>		

NWB107A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10YR 2/1	100					Clay	
		-		20	0		-	Distinct on Deceminant
8-11	10YR 2/1	70	10YR 4/4	30	С	PL/M	Clay	Distinct or Prominent
11-13	10YR 6/6	70	7.5YR 6/8	10	С	PL/M	Clay	
	10YR 2/1	20						Mixed Matrix
*Type: C =	Concentration, D	= Denle	tion RM = Redu	ced Mat	riv MS =	Masked !	Sand Grains **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil		- Depie			IX, IVIO =	Maskeu	Indicators for Proble	
-	stosol (A1)		So	du Clav	od Motrix	(84)		•
	()				ed Matrix	(34)		dox (A16) (LRR K, L, R)
	stic Epipedon (A2)			ndy Redo			Dark Surface (S7	, , ,
	ack Histic (A3)			• •	atrix (S6)			Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	,		•	ky Minera	. ,		rk Surface (TF12)
	atified Layers (A5)			ed Matrix	: (F2)	Other (explain in	remarks)
	m Muck (A10)				atrix (F3)			
De	pleted Below Darl	k Surfac	e (A11) Ree	dox Dark	Surface	(F6)		
	ick Dark Surface (De	oleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Ree	dox Depi	essions (F8)		esent, unless disturbed or
<u> </u>	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive La	ayer (if observed	0:						
Type: Draii		.,-					Hydric Soil Presen	t? No
Depth (inches					-			
• •	,				-			
Remarks:								
HYDROLO	GY							
Wetland Hyd	rology Indicators	8:						
Primary Indica	ators (minimum of	one is r	equired; check a	ll that ap	ply)		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)
	tion (A3)				en Sulfide			son Water Table (C2)
	Marks (B1)				d Rhizosp		· ·	Burrows (C8)
	ent Deposits (B2)			Roots (0			· _ ·	on Visible on Aerial Imagery (C9)
	eposits (B3)				e of Red	uced Iron		or Stressed Plants (D1)
	lat or Crust (B4)						()	phic Position (D2)
	eposits (B5)			(C6)				utral Test (D5)
	tion Visible on Ae	rial Imag	gery (B7)		ick Surfac	e (C7)		· · ·
	ly Vegetated Con				or Well Da			
	Stained Leaves (E		. ,	0	Explain in	• •	3)	
	`	,					, 	
Field Observation Surface Wate		Yes	No	х	Depth (ii	nchee).		
Water Table F		Yes	No	× X	Depth (ii Depth (ii		We	tland Hydrology
Saturation Pre		Yes	No	X	Depth (ii			Present? No
(includes capi		103		~				
· ·		m ຕອບດາ	e monitoring wel	l aerial r	hotos pr	evious in	spections), if available:	
		in gauge		., uonar p				
Remarks:								
i cinai No.								















Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Project/Site:	WETLAN Lake Charlor		RMINATION DATA FORM - I City/County: Martin		-		10/26/2022	
Applicant/Owner:		Charlotte Solar, LL	· · ·		MN Sampling Point:		NWB108A	
Investigator(s):	Susa	an Mayer	Sect	ion, Township,	·		17 T103N R30W	
Landform (hillslope, terra		Hillslope			e, convex, none		None	
Slope (%): 6	Lat:	43.71842	Long:	-94.4552			WGS84	
Soil Map Unit Name:		n complex, 6 to 10 p	ercent slopes,	NW/I	Classification:		NA	
Are climatic/hydrologic co	moderately ero		a of the year?			omorka)		
		or hydrology		Yes (If v disturbed?	no, explain in r	l circumstances	present? No	
Are vegetation		or hydrology	naturally pr				swers in remarks.)	
SUMMARY OF FIN				obiematie	(ii needed,		iswers in remarks.)	
Hydrophytic Vegeta	tion Present?	No						
Hydric Soil Present	ampled area	within a wetlar	nd?	Νο				
Wetland Hydrology	Present?	No If yes, optional wetlan			d site ID:			
Remarks:								
Recently harvested ag	gricultural field.							
VEGETATION Us	se scientific na	ames of plants.						
		•	te Dominant	Indicator	Dominance	Test Workshe	et	
Tree Stratum (I	Plot size:) % Cov	er Species	Status		minant Species FACW, or FAC:	(A)	
2 3					Total Number Species Acros		(B)	
4 5						minant Species FACW, or FAC:	%(A/B)	
Capling/Charle Ctrature		、 <u> </u>	=Total Cov	er	Drevelance	In day Manlack	1	
Sapling/Shrub Stratum 1.	(Plot size:)			Total % Cov	Index Worksh	eet Multiply by:	
2.					OBL species			
3.					FACW speci			
4.					FAC species	s x 3	=	
5.					FACU specie	es x 4	=	
			=Total Cov	er	UPL species	x 5	=	
<u>Herb Stratum</u> 1.	(Plot size:)			Column total Prevalence I	ls (A ndex = B/A =)(B)	
2.								
3						· Vegetation Ir		
4						test for hydropr ance test is >5(nytic vegetation	
5 6						ence index is ≤		
7.						ological adapta		
8.					-	rting data in Re		
9.						ate sheet)		
10.					Proble	matic hydrophy	tic vegetation*	
			=Total Cov	er	(explai	n)		
Woody Vine Stratum 1.	(Plot size:					dric soil and weth disturbed or prob	and hydrology must be lematic	
0			=Total Cov	er	Hydrophy Vegetatio Present?			
Remarks: (Include photo Harvested agricultural fie			t)			<u>No</u>		

NWB108A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	nent the i	ndicator	or confirm the absence	of indicators.)					
Depth <u>Matrix</u>			Redox Features										
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks					
0-5	10YR 2/1	100					Clay						
5-10	10YR 2/1	94	2.5Y 5/3	5	С	PL/M	Clay	Distinct or Prominent					
5-10	101R 2/1	94		-	_	-	Ciay						
			10YR 6/6	1	С	PL		Distinct or Prominent					
10-22	10YR 2/1	80	2.5Y 5/3	19	С	PL/M	Clay	Distinct or Prominent					
			10YR 6/6	1	С	PL		Distinct or Prominent					
*Type: C =	*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix												
Hydric Soil								ematic Hydric Soils*:					
His	stosol (A1)				ed Matrix	(S4)		dox (A16) (LRR K, L, R)					
His	stic Epipedon (A2)		Sar	Sandy Redox (S5)			Dark Surface (S7	Dark Surface (S7) (LRR K, L)					
Bla	ack Histic (A3)			Stripped Matrix (S6)				Iron-Manganese Masses (F12) (LRR K, L, R)					
	drogen Sulfide (A	,		Loamy Mucky Mineral (F1)				y Shallow Dark Surface (TF12)					
	atified Layers (A5)			ed Matrix	(F2)	Other (explain in	remarks)					
	m Muck (A10)				atrix (F3)								
	pleted Below Darl		· · · · · · · · · · · · · · · · · · ·		Surface	. ,							
	ick Dark Surface (ark Surfac	. ,		nytic vegetation and wetland					
	ndy Mucky Minera			dox Depi	ressions (F8)	hydrology must be proplematic	esent, unless disturbed or					
<u> </u>	m Mucky Peat or	Peat (S	3)				problematic						
Restrictive La	ayer (if observed	l):											
Type: Hydric Soil Present? Yes													
Depth (inches	s):				-								
Description													
Remarks:													
HYDROLO	GY												
	rology Indicators												
-	ators (minimum of		equired: check a	ll that an	(vla		Secondary Indica	tors (minimum of two required)					
-		0110-13-1	equired, check a			12)							
Surface Water (A1)				•	Fauna (B	,		Surface Soil Cracks (B6)					
High Water Table (A2)					Juatic Plai	` '	°	Drainage Patterns (B10) Dry-Season Water Table (C2)					
Saturation (A3)					en Sulfide d Rhizosp		· ·	Crayfish Burrows (C8)					
Water Marks (B1)					•		° /	on Visible on Aerial Imagery (C9)					
Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial In Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D							••••						
	Mat or Crust (B4)						· · ·	phic Position (D2)					
-	Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5)												
Inunda	tion Visible on Ae	rial Imag	gery (B7)		ick Surfac	ce (C7)							
Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9)													
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	s)						
Field Observ	ations:												
Surface Wate		Yes	No	Х	Depth (i	nches):		deved the deet					
Water Table F	ater Table Present? Yes No X Depth (inches) Wetland Hydrology							tland Hydrology Present?					
Saturation Pre	esent?	Yes	No	Х	Depth (i	nches):		No No					
(includes capillary fringe)													
Describe Reco	orded Data (strea	m gauge	e, monitoring wel	l, aerial p	ohotos, pr	evious ir	nspections), if available:						
													
Remarks:													




Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWB108

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WETI Lake Ch	AND DETER		ON DAT	• A FORM Mart		st Region Sampling Date	e: 10/26/2022
Applicant/Owner:		_ake Charlotte So	_ `		State:	MN	Sampling Poir	
Investigator(s):		Susan Mayer		Sect	ion, Townsh	ip. Range:		ec.17 T103N R30W
Landform (hillslope, terra		Plain			relief (conca			None
Slope (%): 0	Lat:	43.71789		Long:	-94.45		Datum:	WGS84
Soil Map Unit Name:		lencoe complex, () to 2 per	Ŭ -		VI Classific	ation:	NA
Are climatic/hydrologic c		-		-			ain in remarks)	1
		, or hydrology		-	y disturbed?			stances present? No
		, or hydrology		-	oblematic?			any answers in remarks.)
		_, ei) a ei egy		natarany p		(
Hydrophytic Vegeta	ation Present?	No No						
Hydric Soil Present	t?	No		Is the s	ampled are	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes, o	ptional wetle	and site ID:	:	
Remarks:								
Recently harvested a			nto					
VEGETATION 0		•		Dominant	Indicator	Domir	nance Test Wo	orksheet
<u>Tree Stratum</u> ((Plot size:			Species	Status	Numbe	er of Dominant S e OBL, FACW, o	Species
3							Number of Domines Across All Str	
4 5				Tatal Oas			nt of Dominant S e OBL, FACW, o	
Sopling/Shrub Stratum	(Plot size:	、 _		=Total Cov	er	Brove	Janaa Indax M	Vorkahaat
Sapling/Shrub Stratum 1.	(Plot size:)					alence Index V % Cover of:	Multiply by:
2.							species	x 1 =
3.							V species	x 2 =
4.							species	x 3 =
5.							J species	x 4 =
				=Total Cov	er	UPLs	species	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1 2.	-					Preva	lence Index = I	B/A =
3						Hydro	onhytic Veget	ation Indicators:
<u> </u>								hydrophytic vegetation
5							Dominance tes	
6							Prevalence inc	lex is ≤3.0*
7.							Morphological	adaptations* (provide
8							supporting data	a in Remarks or on a
9							separate sheet	
10							Problematic hy	/drophytic vegetation*
				=Total Cov	er		(explain)	
Woody Vine Stratum 1.	(Plot size:)					ors of hydric soil a unless disturbed	and wetland hydrology must be I or problematic
				=Total Cov	er	Veç	drophytic getation esent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie			e sheet)					

NWB110A

Profile Descr	iption: (Describe	e to the	depth needed	to docum	nent the i	ndicator	or confirm the absence	of indicators.)
Depth	Depth Matrix Inches) Color (moist) % Color			edox Fea	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-15	10YR 2/1	100					Clay	
15-20	10YR 2/1	85	2.5Y 5/3	15	С	PL/M	Clay	Distinct or Prominent
20-31	2.5Y 6/3	80	7.5YR 5/8	1	C	PL	Clay	
20-31			7.51K 5/6	1	C	PL	Ciay	
	10YR 2/1	19						Mixed Matrix
-								
*Turnet C =	Concentration D	- Donla	tion DM - Doc	lugad Mat	riv MC -	Maakad	Cand Craina **Lagatic	n: DL – Doro Lining M – Motrix
· ·	Concentration, D	= Depie	Rion, Rivi = Rec	luced Mat	rix, IVIS =	Masked		on: PL = Pore Lining, M = Matrix
Hydric Soil	stosol (A1)		0	andy Gley	od Matrix	(\$4)	Indicators for Proble	dox (A16) (LRR K, L, R)
				andy Red		(34)	Dark Surface (S7	
	stic Epipedon (A2) ack Histic (A3)			•	. ,			, , , ,
	drogen Sulfide (A3)	4)		tripped Ma bamy Muc		N (E1)		Masses (F12) (LRR K, L, R) rk Surface (TF12)
	atified Layers (A5	,		barny Muc	•	. ,	Other (explain in	
	m Muck (A10))		epleted M		(1 Z)		Temarks)
	pleted Below Darl	k Surfac		edox Dark	. ,	(F6)		
	ick Dark Surface (· · · <u> </u>	epleted Dark		. ,		
	ndy Mucky Minera	. ,		edox Dep		· · /		nytic vegetation and wetland esent, unless disturbed or
		edux Dep	163310113 (10)	problematic			
	m Mucky Peat or		0)			r		
	ayer (if observed	l):					Ukudaia Cail Daasaa	40 No
Type: Depth (inches	· · ·				-		Hydric Soil Presen	t? <u>No</u>
Depth (inches					-			
Remarks:								
HYDROLO	-							
-	rology Indicators							
-	ators (minimum of	one is r	equired; check					ators (minimum of two required)
	e Water (A1)			_ ·	Fauna (B	,		Soil Cracks (B6)
Ü	/ater Table (A2)			_	uatic Plai	` '		e Patterns (B10)
	tion (A3)			_	en Sulfide	`	· _ ·	son Water Table (C2)
	Marks (B1)				d Rhizosp	pheres on	<u> </u>	Burrows (C8)
	ent Deposits (B2)			_ Roots (upped Iron		on Visible on Aerial Imagery (C9)
	eposits (B3) /at or Crust (B4)				ce of Red		· · · · · · · · · · · · · · · · · · ·	or Stressed Plants (D1) ohic Position (D2)
	eposits (B5)			(C6)	non iteut			utral Test (D5)
	tion Visible on Ae	rial Ima	nerv (B7)	_ ` `	uck Surfac	ce (C7)		
	ly Vegetated Con				or Well Da	` '		
·	Stained Leaves (E				Explain in		3)	
Field Observ	ations:	,			•		,	
Surface Wate		Yes	No	х	Depth (i	nches):		
Water Table F		Yes	No	X	Depth (i	· · -	We	tland Hydrology
Saturation Pre	esent?	Yes	No	Х	Depth (i	· -		Present? No
(includes capi	llary fringe)							
Describe Rec	orded Data (strea	m gauge	e, monitoring w	ell, aerial p	photos, pr	evious in	spections), if available:	
Remarks:								







80 120 160 200 40



1960-









Feature ID: NWB110

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



TETRA TECH

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Aerial Photograph Review Lake Charlotte Solar Martin County, Minnesota

Project/Site:	WET Lake Ch	LAND DETER		ION DAT /County:	A FORM		t Region Sampling Da	ate: 10/26/2022
Applicant/Owner:		Lake Charlotte Sc		county.	State:		Sampling Po	
Investigator(s):		Susan Mayer	, ==0	Sec	tion, Townsh			Sec.17 T103N R30W
Landform (hillslope, terra		Broad Depr	ression		l relief (conca			Concave
Slope (%): 0	Lat:	43.71927	0001011	Long:	-94.44		Datum:	WGS84
Soil Map Unit Name:		Glencoe complex,	0 to 2 per	. .		VI Classifica		NA
Are climatic/hydrologic cc							ain in remarks	
		, or hydrology			ly disturbed?			nstances present? No
		, or hydrology			•			n any answers in remarks.)
Are vegetation SUMMARY OF FINI	, soil				roblematic?	(ii ne	eueu, explai	n any answers in remarks.)
Hydrophytic Vegetat	tion Present	? <u>No</u>						
Hydric Soil Present?)	No		Is the	sampled are	a within a	wetland?	No
Wetland Hydrology	Present?	No		If yes,	optional wetl	and site ID:		
Remarks:								
Recently harvested ac	ricultural fie	ld.						
VEGETATION Us	e scientifi							
				Dominant	Indicator	Domir	nance Test V	Vorksheet
Tree Stratum (F	Plot size:)	% Cover	Species	Status		er of Dominant e OBL, FACW	
2 3							lumber of Don s Across All S	
4 5							t of Dominant OBL, FACW	
		-		=Total Cov	/er			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index	Worksheet
1						Total ^o	% Cover of:	Multiply by:
2							pecies	x 1 =
3							/ species	x 2 =
4							pecies	x 3 =
5				=Total Cov	<i>/</i>		species	x 4 = x 5 =
Harb Stratum	(Plot cizo:	\			/ei			
Herb Stratum	(Plot size:)					n totals lence Index =	(A) (B)
1 2						Fieva		= D/A =
3						Hydro	nhytic Vege	tation Indicators:
Δ						-		hydrophytic vegetation
5							Dominance te	
6							Prevalence ir	
7.							Morphologica	al adaptations* (provide
8.							supporting da	ata in Remarks or on a
9.							separate she	
10.								nydrophytic vegetation*
				=Total Cov	/er		(explain)	
<u>Woody Vine Stratum</u> 1.	-)						I and wetland hydrology must be ed or problematic
2		_		=Total Cov	/er	Veg	Irophytic jetation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fiel			e sheet)					

NWB111A

Profile Desci	1		Da	dox East	uroe				
Depth (Inchor)	Matrix			dox Feat			-		- .
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textur	e	Remarks
0-23	10YR 2/1	100					Clay		
23-28	10YR 2/1	97	2.5Y 4/3	2	С	PL/M	Clay		Distinct or Prominent
			10YR 3/4	1	С	PL/M			Distinct or Prominent
28-35	2.5Y 5/3	40					Clay		
	10YR 2/1	30							Mixed Matrix
	2.5Y 6/4	30							Mixed Matrix
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mat	rix, MS =	Masked S	Sand Grains.	**Location	: PL = Pore Lining, M = Matri
Hydric Soil	Indicators:						Indicators	for Problem	natic Hydric Soils*:
- His	stosol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast I	Prairie Redo	ox (A16) (LRR K, L, R)
His	stic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark S	Surface (S7)	(LRR K, L)
Bla	ack Histic (A3)		Stri	ipped Ma	trix (S6)		Iron-Ma	anganese M	lasses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very S	hallow Dark	Surface (TF12)
Sti	atified Layers (A5)	Loa	amy Gley	ed Matrix	(F2)	Other ((explain in re	emarks)
2 0	m Muck (A10)		Dej	pleted M	atrix (F3)				
De	pleted Below Darl	< Surfac	e (A11) Red	dox Dark	Surface	(F6)			
Th	ick Dark Surface (A12)	Dej	pleted Da	ark Surfac	ce (F7)	*Indicators	of hydrophy	tic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Ree	dox Depi	essions (F8)	hydrology n	nust be pres	sent, unless disturbed or
5 0	m Mucky Peat or	Peat (S	3)				problematic	;	
Restrictive L	ayer (if observed):							
Гуре:							Hydric So	oil Present?	? No
Depth (inches	s):	-					Hydric So	oil Present?	? <u>No</u>
Depth (inches	, <u> </u>						Hydric So	oil Present?	? <u>No</u>
Depth (inches Remarks:	, <u> </u>						Hydric So	oil Present?	? <u>No</u>
Depth (inches Remarks: HYDROLO Wetland Hyd	GY		equired; check a	Il that ap			-		PNo
Depth (inches Remarks: HYDROLO Netland Hyd Primary Indica	GY rology Indicators		equired; check a		<u>ply)</u> Fauna (B	:13)	-	dary Indicato	
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac	GY rology Indicators ators (minimum of		equired; check a	Aquatic	<u> </u>		-	dary Indicato	ors (minimum of two required
Pepth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W	GY rology Indicators ators (minimum of e Water (A1)		equired; check a	Aquatic True Aq	Fauna (B	nts (B14)	<u>Seconc</u>	dary Indicato _ Surface So _ Drainage F	ors (minimum of two required bil Cracks (B6)
Pepth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High W Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2)		equired; check a	Aquatic True Aq Hydroge	Fauna (B uatic Plar	nts (B14) Odor (C	<u>Seconc</u> 	dary Indicato _ Surface So _ Drainage F _ Dry-Seaso	o <u>rs (minimum of two required</u> oil Cracks (B6) Patterns (B10)
Approximation of the second se	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)		equired; check a	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	<u>Seconc</u> 	dary Indicato _ Surface So _ Drainage F _ Dry-Seaso _ Crayfish B	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2)
Appendix Content of the second	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presenc	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu	nts (B14) Odor (C oheres on uced Iron	Second 1) Living (C4)	dary Indicato 	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1)
Arrimary Indica Primary Indica Primary Indica Surfac High W Satura Water Satura Drift Di Algal N	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presend Recent	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu	nts (B14) Odor (C oheres on uced Iron	Second 1) Living (C4)	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2)
Primary Indica Surfac High W Satura Water Sedime Drift D Algal M Iron De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	<u>one is r</u>		Aquatic True Aq Hydroge Oxidized Roots (0 Presend Recent (C6)	Fauna (B uatic Plar on Sulfide d Rhizosp d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T	Second 1) Living (C4)	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1)
Algal M Coepth (inchess Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Drift Du Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae	one is r rial Imag	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Second 1) Living (C4)	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2)
Pepth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac Surf	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con	one is r rial Imag cave Su	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ce of Redu Iron Redu ck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Second 1) Living (C4) Tilled Soils X	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2)
Algal M Algal M Algal M Algal M Algal M Algal M Algal M Algal M Algal M Algal M Mater- Mate	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E	one is r rial Imag cave Su	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Second 1) Living (C4) Tilled Soils X	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2)
Algal M Copth (inchess Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Drift Du Algal M Iron De Inunda Sparse Water- Field Observ	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /lat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations:	one is r rial Imag cave Su 39)	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc (C6) Thin Mu Gauge o Other (E	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) e of Redu iron Redu ck Surfac or Well Da	nts (B14) Odor (Co oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Second 1) Living (C4) Tilled Soils X	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2)
Algal M Primary Indica Primary Indica Surfac High W Satura Water Drift D Algal M Iron De Inunda Sparse Water- Field Observ Surface Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present?	one is r rial Imag cave Su 39) Yes	gery (B7) urface (B8) No	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge o Other (E	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in	nts (B14) Odor (Co oheres on ucced Iron uction in T ce (C7) ata (D9) Remarks nches): _	Second 1) Living (C4) Tilled Soils X	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neut	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2)
Algal M Primary Indica Primary Indica Surfac High W Satura Water Drift D Algal M Iron De Inunda Sparse Water- Field Observ Surface Water Vater Table F	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present?	rial Imag cave Su 39) Yes Yes	gery (B7) Irface (B8) No No	Aquatic True Aq Hydroge Oxidizer Roots (C Presenc (C6) Thin Mu Gauge C Other (E X X	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ce of Redu iron Redu ck Surfac or Well Da explain in Depth (ii Depth (ii	nts (B14) Odor (Coheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches):	Second 1) Living (C4) Tilled Soils X	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neut	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2) ral Test (D5) and Hydrology Present?
Algal M Field Observ Surface Water The field Construction Construct	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	one is r rial Imag cave Su 39) Yes	gery (B7) urface (B8) No	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge o Other (E	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in	nts (B14) Odor (Coheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches):	Second 1) Living (C4) Tilled Soils X	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neut	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2) ral Test (D5) and Hydrology
Pepth (inchess Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surface Mater Sedime Sedime Saturation Pro- Saturation Pro- Sa	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in	nts (B14) Odor (Coheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	Second 1)	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neutr	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2) ral Test (D5) and Hydrology Present?
Pepth (inchess Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surface Mater Sedime Sedime Saturation Pro- Saturation Pro- Sa	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in	nts (B14) Odor (Coheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	Second 1)	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neutr	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2) ral Test (D5) and Hydrology Present?
Pepth (inchess Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surface Mater Sedime Sedime Saturation Pro- Saturation Pro- Sa	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in	nts (B14) Odor (Coheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	Second 1)	dary Indicato Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neutr	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C Stressed Plants (D1) nic Position (D2) ral Test (D5) and Hydrology Present?









Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500



Feature ID: NWB111

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- —— Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WET Lake Ch	LAND DETER		ION DAT	A FORM Mar		st Region Sampling Dat	e: 10/26/2022
Applicant/Owner:		Lake Charlotte Sol	_ `	oounty.	State:	MN	Sampling Poi	
Investigator(s):		Susan Mayer	, ===	Sec	tion, Townsh			ec.17 T103N R30W
Landform (hillslope, terra		Depressi	ion		l relief (conc		-	Concave
Slope (%): 2	Lat:	43.72041		Long:	-94.45		Datum:	WGS84
Soil Map Unit Name:		Glencoe complex, () to 2 per	· · ·		NI Classifica		NA
Are climatic/hydrologic c							ain in remarks)	
		, or hydrology			ly disturbed			, stances present? No
		, or hydrology		-	-			any answers in remarks.)
Are vegetation SUMMARY OF FIN				naturaliy p	roblematic?	(ii ne	eueu, explain	any answers in remarks.)
Hydrophytic Vegeta	tion Present	? No						
Hydric Soil Present	?	No		Is the	sampled are	ea within a	wetland?	No
Wetland Hydrology	Present?	No		If yes,	optional wet	land site ID:		
Remarks:								
Recently harvested a	gricultural fie	łld.						
VEGETATION Us	se scientifi	•						
				Dominant	Indicator	Domir	nance Test W	orksheet
Tree Stratum (I	Plot size:)	% Cover	Species	Status		er of Dominant S e OBL, FACW,	
3							lumber of Domi s Across All Str	
4 5							t of Dominant S OBL, FACW,	
		_		=Total Cov	/er			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index V	Vorksheet
1						Total	% Cover of:	Multiply by:
2							pecies	x 1 =
3							/ species	x 2 =
4							pecies	x 3 =
5				Tatal Oa			species	x 4 =
Liste Otras trans		、 —		=Total Cov	/er		pecies	x 5 = (D)
Herb Stratum	(Plot size:)					n totals	(A) (B)
1 2						Preva	lence Index =	B/A =
3.						Hydro	nhytic Vogot	ation Indicators:
4						-		hydrophytic vegetation
5							Dominance te	
6							Prevalence in	
7.								adaptations* (provide
8.								a in Remarks or on a
9.							separate shee	
10								ydrophytic vegetation*
				=Total Cov	/er		(explain)	
Woody Vine Stratum 1.)				*Indicato	ors of hydric soil	and wetland hydrology must be d or problematic
2				=Total Cov	ver	Veg	Irophytic jetation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie			e sheet)			-		<u>No</u>

NWB112A

Depth			Redox Fea	atures					
(Inches)	Color (moist)	%	Color (mois	t) %	Type*	Loc**	Тех	ture	Remarks
0-22	10YR 2/1	100		,			С	lay	
22-30	2 EV E/2	100						lov	
22-30	2.5Y 5/3	100			-			lay	
					_				
*Type: C =	Concentration, D	= Deple	etion. RM = Re	educed Ma	trix. MS =	Masked S	Sand Grains	. **Locatio	on: PL = Pore Lining, M = Matr
	Indicators:	Dobie							ematic Hydric Soils*:
•	stosol (A1)			Sandy Gle	ved Matrix	(S4)			dox (A16) (LRR K, L, R)
	stic Epipedon (A2)	Ň		Sandy Rec	-	(04)			7) (LRR K, L)
)		-					
	ack Histic (A3)	4)		Stripped M	· · /			-	Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	,		Loamy Mu	-				rk Surface (TF12)
	ratified Layers (A5	9		Loamy Gle	•	. ,	Oth	er (explain in	remarks)
	cm Muck (A10)	. o -		Depleted N					
	pleted Below Dar		· · · · · · · · · · · · · · · · · · ·	Redox Dar		` '			
	ick Dark Surface (` '		Depleted D				, ,	nytic vegetation and wetland
	indy Mucky Minera	• •		Redox Dep	pressions ((F8)			esent, unless disturbed or
5 c	cm Mucky Peat or	Peat (S	3)				problem	alic	
estrictive L	ayer (if observed	I):							
ype:	•						Hydric	Soil Presen	it? No
epth (inches	3):				_		•		
emarks:					_				
emarks:									
	GY								
YDROLO		s:							
YDROLO /etland Hyd	rology Indicators		required: chec	k all that a		<u> </u>	Sec	ondary Indica	ators (minimum of two required
YDROLO Tetland Hyd	rology Indicators ators (minimum of		required; chec			(13)	Sec		
YDROLO etland Hyd imary Indica Surfac	rology Indicators ators (minimum of e Water (A1)		required; chec	Aquatio	c Fauna (B		Sec	Surface	Soil Cracks (B6)
YDROLO etland Hyd imary Indica Surfac High W	rology Indicators ators (minimum of e Water (A1) Vater Table (A2)		required; chec 	Aquatio	c Fauna (B quatic Plai	nts (B14)		Surface	Soil Cracks (B6) e Patterns (B10)
YDROLO etland Hyd imary Indica Surfac High W Satura	Irology Indicators <u>ators (minimum of</u> e Water (A1) Vater Table (A2) tion (A3)		required; chec 	Aquatio True A Hydrog	c Fauna (B quatic Plai jen Sulfide	nts (B14) Odor (C	1)	Surface Drainage Dry-Sea	Soil Cracks (B6) e Patterns (B10) son Water Table (C2)
YDROLO etland Hyd imary Indica Surfac High W Satura Water	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		required; chec - - -	Aquatio True A Hydrog Oxidize	c Fauna (B quatic Plai jen Sulfide ed Rhizosp	nts (B14) Odor (C	1)	Surface Drainage Dry-Sea Crayfish	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8)
YDROLO /etland Hyd /imary Indica Surfac High W Satura Water Sedimo	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		required; chec - - - -	Aquation True A Hydrog Oxidize Roots	c Fauna (B quatic Plan gen Sulfide ed Rhizosp (C3)	nts (B14) Odor (C oheres on	1) Living	Surface Drainage Dry-Sea Crayfish	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C
YDROLO etland Hyd imary Indica Surfac High W Satura Water Sedim Drift Du	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		required; chec 	Aquation True A Hydrog Oxidize Roots of Presen	c Fauna (B quatic Plai gen Sulfide ed Rhizosp (C3) ace of Redu	nts (B14) Odor (C oheres on uced Iron	1) Living (C4)	Surface Drainage Dry-Sea Crayfish Saturatio Stunted	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C or Stressed Plants (D1)
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YDROLO Yetland Hyd rimary Indica Surfac High W Satura Water Sedima Drift Da Algal N Iron De Inunda Sparse Water- ield Observ vurface Wate Algal A Iron De Inunda Sparse Water- Table F aturation Pro	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (B rations: or Present? Present?	rial Imag cave Su 39) Yes	gery (B7) urface (B8) 	Aquation True A Hydrog Oxidize Roots (Present (C6) Thin M Gauge Other (c Fauna (B quatic Plan gen Sulfide ed Rhizosp (C3) ace of Redu t Iron Redu uck Surfac or Well Da Explain in	nts (B14) Odor (C oheres on uced Iron uction in 7 ce (C7) ata (D9) Remarks nches):	1) Living (C4) Filled Soils	Surface Drainage Dry-Sea Crayfish Saturatio Stunted X Geomor FAC-Ne	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C or Stressed Plants (D1) phic Position (D2) utral Test (D5)
IYDROLO /etland Hyd rimary Indica Surfac High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre- ncludes cap	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Aat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (B ations: rr Present? esent? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7) 	Aquation True A Hydrog Oxidize Roots I Present (C6) Thin M Gauge Other (D X X X	c Fauna (B quatic Plan jen Sulfide ed Rhizosp (C3) ice of Redu t Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii	nts (B14) Odor (C oheres on uced Iron uction in 7 ce (C7) ata (D9) Remarks nches): nches):	1) Living (C4) Filled Soils	Surface Drainage Dry-Sea Crayfish Saturatio Stunted X Geomor FAC-Nei	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C or Stressed Plants (D1) phic Position (D2) utral Test (D5)
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0 40 80 120 160 200

11156

2019











Feature ID: NWB112

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- —— Index
- ----- Intermediate

Aerial Photograph Review

	WETL	AND DETER	MINAT	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Ch	arlotte	City/	County:	Marti	n	Sampling D	ate:	10/26/2022
Applicant/Owner:	L	_ake Charlotte So	olar, LLC		State:	MN	Sampling P	oint:	NWB113A
Investigator(s):	S	Susan Mayer		Section	on, Townshij	p, Range:		Sec.17 T1	03N R30W
Landform (hillslope, terra	ace, etc.):	Plair	1	Local r	elief (concav	ve, conve	x, none):		None
Slope (%): 1	Lat:	43.72133		Long:	-94.450)93	Datum:		WGS84
Soil Map Unit Name:	Canisteo-G	lencoe complex,	0 to 2 per	cent slopes	NW	'I Classific	ation:		NA
Are climatic/hydrologic c	onditions of th	ne site typical for	this time c	of the year?	Yes (lf no, expl	ain in remark	(s)	
Are vegetation	, soil	, or hydrology		Significantly	disturbed?	Are "	'normal circu	mstances p	present? Yes
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, expla	in any ans	wers in remarks.)
SUMMARY OF FIN	DINGS								
Hydrophytic Vegeta	ation Present?	No No							
Hydric Soil Present	?	No		Is the sa	mpled area	a within a	wetland?		No
Wetland Hydrology	Present?	No		If yes, or	tional wetla	nd site ID	:		
Remarks:									
VEGETATION Us	se scientific	names of pla	ants.						
				Dominant	Indicator	Domi	nance Test \	Norksheet	•
Tree Stratum (Plot size:)	% Cover	Species	Status		er of Dominan e OBL, FACW		0 (A)
2 3							Number of Do		0 (B)
4.									()
5.							nt of Dominan e OBL, FACW		% (A/B)
		_		=Total Cove	r				
Sapling/Shrub Stratum	(Plot size:)				Preva	alence Index	Workshe	et
1						Total	% Cover of:		lultiply by:
							species		·
3							V species	x 2 =	
4							species		•
5				=Total Cove	r		J species species		:
Herb Stratum	(Plot size:) –			I		nn totals	^ X J - (A)	
1.	(1 101 3120	/					alence Index		(D)
2.									
3.						Hydro	ophytic Veg	etation Inc	licators:
4.									rtic vegetation
5.							Dominance	test is >50	%
6							Prevalence i	ndex is ≤3	.0*
7									ons* (provide
8							supporting d		arks or on a
9							separate she		
10				=Total Cove	r		Problematic (explain)	nydrophyti	c vegetation*
Woody Vine Stratum 1.	(Plot size:)					ors of hydric so , unless disturb		nd hydrology must be matic
2		_		=Total Cove	r	Veç	drophytic getation esent?	<u>No</u>	
Remarks: (Include photo Bare ground: 100%	numbers her	e or on a separat	e sheet)						

NWB113A

Depth (Inches) Matrix Redox Features Color (moist) % Color (moist) % Type* Loc** Image: Color (moist) % Color (moist) % Type* Loc** Image: Color (moist) % Color (moist) % Type* Loc** Image: Color (moist) Image: Color (moist) % Color (moist) % Loc** Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Type: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Image: Color (moist) Type: Color (moist) Image: Color (moist) Image: Color (moist)	Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
(Inches) Color (moist) % Type* Loc** Texture Remarks Image: Second and the second ano	Depth	Matrix	Re	dox Feat	ures						
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Locator: of Poblematic Hydric Solis": Histosol (A1) Sandy Gleved Matrix (S3) Indicators for Problematic Hydric Solis": Histosol (A1) Sandy Redux (S5) Coast Prairie Redux (A16) (LRR K, L, R) Black Histic (A3) Stripped Matrix (S6) Coast Prairie Redux (A16) (LRR K, L, R) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Cost Prairie Redux (A16) (LRR K, L, R) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Cost Prairie Redux (A16) (Depleted Matrix (F2)) Cother (scplain in remarks) Beptied Below Dark Surface (A11) Redox Dark Surface (F7) "Indicators of hydrophytic vegetation and wetland hydrology mult be present, unless disturbed or problematic Paph (inches):	•		%				Loc**	Texture	Remarks		
Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Sandy Gleyed Matrix (S4) Histosol (A1) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfde (A4) Learny Mucky Mineral (F1) Straitfied Layers (A5) Learny Gleyed Matrix (S6) Thrick Dark Surface (A12) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Thrick Dark Surface (A12) Depleted Dark Surface (F7) Type: Depleted Dark Surface (F7) Type: Hydric Soil Present? Partice Layer (If observed): Type: Prip: Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required Rhiz (S1) Surface Water (A1) Aquatic Flauna (B13) Surface Soil Cracks (B6) Surface Soil Cracks (B1) Oxid ace Rhizospheres on Living Carylish Burrows (C8) Surface Soil Cracks (B6) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil (B1) Oxid ced Rhizospheres on Living Carylish Burrows (C8) Obvious not a wetland. Could not dig due to soil compaction. Soils C3) <t< td=""><td></td><td></td><td>,,,</td><td></td><td>,</td><td></td><td></td><td></td><td></td></t<>			,,,		,						
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Hydric Soll Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Sandy Gleyed Matrix (S4) Cost Prairie Redox (A16) (LRR K, L, R) Histosol (A1) Sandy Redox (S5) Dask Surface (S7) (LRR K, L) Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, R) Straitfield Layers (A5) Learny Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Opeleted Below Dark Surface (A11) Redox Dark Surface (F7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Indicators (minimum of two required thark Sorface (F7) Type: Hydric Soil Present? No Depleted Matrix (S4) Secondary Indicators (minimum of two required thark sorface (S7) (LRR K, L) Remarks: Obvious not a wetland. Could not dig due to soil compaction. Soils assumed not hydric. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required thark s(B1) Surface Water (A1) Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Sturface Water (A1)											
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	· ·		ກ ດລາງດ	e monitoring wel	l aerial r	hotos pr	evious in	spections) if available.			
Remarks:			n gauge		i, aona p						
Remarks:											
	Remarks:										







0 40 80 120 160 200 Feet













Feature ID: NWB113

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WET Lake Ch	LAND DETER		ION DAT County:	A FORM		st Region Sampling D	Date: 10/26/2022
Applicant/Owner:		Lake Charlotte So		oounty.	State:	MN	Sampling P	
Investigator(s):		Susan Mayer	, ==0	Sec	tion, Townsh			Sec.17 T103N R30W
Landform (hillslope, terra		Broad Depr	ression		relief (conca		-	Concave
Slope (%): 0	Lat:	43.72218		Long:	-94.44		Datum:	WGS84
Soil Map Unit Name:		Glencoe complex,	0 to 2 per	· · ·		VI Classifica		NA
Are climatic/hydrologic c		-					ain in remarl	
		, or hydrology		-	ly disturbed?			imstances present? No
		, or hydrology			•			ain any answers in remarks.)
Are vegetation SUMMARY OF FIN	, soil	_, or hydrology		naturaliy p	roblematic?	(ii ne	eueu, expia	
Hydrophytic Vegeta	ation Present	? <u>No</u>						
Hydric Soil Present	?	No		Is the	sampled are	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes,	optional wetl	and site ID:		
Remarks:								
Recently harvested a	gricultural fie	ld.						
VEGETATION Us	se scientifi	•						
				Dominant	Indicator	Domir	nance Test	Worksheet
Tree Stratum ((Plot size:)	% Cover	Species	Status		er of Dominar e OBL, FACV	
2 3							lumber of Do s Across All :	
4 5							t of Dominan OBL, FACV	
		_		=Total Cov	/er			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index	Worksheet
1						Total	% Cover of:	Multiply by:
2							pecies	x 1 =
3							/ species	x 2 =
4							pecies	x 3 =
5				=Total Cov			species	x 4 = x 5 =
Harb Stratum	(Plot cizo:	、 -			/ei			
Herb Stratum	(Plot size:)					n totals	(A) (B)
1 2						Fieva		= D/A =
3						Hydro	nhytic Vea	etation Indicators:
<u> </u>								or hydrophytic vegetation
5								test is >50%
6								index is ≤3.0*
7.							Morphologic	al adaptations* (provide
8.							supporting c	lata in Remarks or on a
9.							separate sh	eet)
10.							Problematic	hydrophytic vegetation*
				=Total Cov	/er		(explain)	
Woody Vine Stratum 1.)				*Indicato	ors of hydric so	bil and wetland hydrology must be bed or problematic
2				=Total Cov	ver	Veg	Irophytic jetation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie			te sheet)			-		<u>No</u>

NWB114A

Depth	Matrix		Po	dox Feat	tures				
(Inches)		0/			1	1 **	T		Deveda
· · ·	Color (moist)	%	Color (moist)	%	Type*	Loc**	Text		Remarks
0-22	10YR 2/1	100					Cl	ау	
22-30	2.5Y 3/2	95	2.5Y 5/3	5	С	PL/M	Cl	ау	Faint
					1				
+= 0								**1 (*	
21	Concentration, D	= Deple	etion, RM = Redu	iced Mati	rix, MS =	Masked			n: PL = Pore Lining, M = Matr
•	Indicators:		0			(0 ()			matic Hydric Soils*:
	stosol (A1)				ed Matrix	(S4)			dox (A16) (LRR K, L, R)
	stic Epipedon (A2)			ndy Redo				Surface (S7	
	ack Histic (A3)			• •	atrix (S6)			-	Masses (F12) (LRR K, L, R)
	drogen Sulfide (A			•	ky Minera	. ,			rk Surface (TF12)
St	ratified Layers (A5)			ed Matrix	(F2)	Othe	er (explain in	remarks)
2	cm Muck (A10)		De	pleted Ma	atrix (F3)				
De	epleted Below Dark	< Surfac	e (A11) Re	dox Dark	Surface	(F6)			
Th	iick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicato	rs of hydroph	ytic vegetation and wetland
Sa	andy Mucky Minera	al (S1)	Re	dox Depr	ressions (F8)			esent, unless disturbed or
5 (cm Mucky Peat or	Peat (S	3)				problema	itic	
estrictive I	ayer (if observed).							
ype:	ayer (il observed	<i>.</i>					Hydric	Soil Presen	t? No
	z).				_		nyano	00111103011	
• •					-				
Remarks:	,								
emarks:	,								
emarks:	GY Irology Indicators								
Remarks: IYDROLO Vetland Hyd	GY		equired; check a	Il that ap	<u>-</u>		<u>Secc</u>	ndary Indica	tors (minimum of two required
Temarks:	GY Irology Indicators		equired; check a		<u>ply)</u> Fauna (B	313)	Seco		tors (minimum of two required Soil Cracks (B6)
IYDROLO Ietland Hyc rimary Indic Surfac	GY Irology Indicators ators (minimum of		equired; check a	Aquatic		,	Secc	Surface	
emarks: IYDROLO /etland Hyc rimary Indic Surfac High V	GY Irology Indicators ators (minimum of re Water (A1)		equired; check a	Aquatic True Aq	Fauna (B	nts (B14)		Surface Surface	Soil Cracks (B6)
emarks: IYDROLO /etland Hyc rimary Indic Surfac High V Satura	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; check a	Aquatic True Aq Hydroge	Fauna (B Juatic Plar	nts (B14) Odor (C	1)	Surface \$ Drainage Dry-Seas	Soil Cracks (B6) Patterns (B10)
emarks: IYDROLO /etland Hyc rimary Indic Surfac High V Satura Water	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3)		equired; check a	Aquatic True Aq Hydroge	Fauna (B Juatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	1)	Surface S Drainage Dry-Seas	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
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Remarks: HYDROLO Vetland Hyc Primary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water Sield Observ Surface Water Vater Table I Saturation Pr ncludes cap	GY Irology Indicators ators (minimum of ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aer ely Vegetated Com- Stained Leaves (E vations: er Present? Present? esent?	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu ick Surfac or Well Da Explain in Depth (ii Depth (ii	nts (B14) Odor (C oheres on uced Iron uction in ce (C7) ata (D9) Remarks nches): 	1) Living (C4) Filled Soils ;)	Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o X Geomorp FAC-Neu	Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?
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0 40 80 120 160 200 Feet









Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500



Feature ID: NWB114

- Survey Area
 - Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WET Lake Ch	LAND DETER		ON DAT	A FORM · Mari		st Region Sampling Date:	10/26/2022
Applicant/Owner:		Lake Charlotte So	_ `		State:		Sampling Point:	
Investigator(s):		Susan Mayer		Sect	ion, Townsh			.17 T103N R30W
Landform (hillslope, terra	ce, etc.):	Plain			relief (conca			None
Slope (%): 0	Lat:	43.72002		Long:	-94.44		Datum:	WGS84
Soil Map Unit Name:	Canisteo-C	Glencoe complex, (0 to 2 per	cent slopes	NV	VI Classifica	ation:	NA
Are climatic/hydrologic co		-		-			ain in remarks)	
		, or hydrology		-	y disturbed?		normal circumst	ances present? No
Are vegetation	, soil	, or hydrology		-	oblematic?		eded, explain a	iny answers in remarks.)
SUMMARY OF FIN						· ·		
Hydrophytic Vegeta	tion Present	? <u>No</u>						
Hydric Soil Present?	?	No		Is the s	ampled are	ea within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes, o	optional wetl	and site ID:		
Remarks:								
Recently harvested ag			nto.					
VEGETATION Us	e scientin	•		Dominant	Indicator	Domir	nance Test Wor	kshoot
Tree Stratum (F	Plot size:			Species	Status	Numbe	er of Dominant Sp e OBL, FACW, or	ecies
2 3							lumber of Domina s Across All Strat	
4 5				Tatal Cau			at of Dominant Sp e OBL, FACW, or	
Sapling/Shrub Stratum	(Plot size:	, —		=Total Cov	er	Brova	lence Index Wo	vrkshoot
<u>Sapling/Shrub Stratum</u> 1.	(FIUL SIZE.)					% Cover of:	Multiply by:
2.							species	x 1 =
3.							v species	x 2 =
4.							species	x 3 =
5.						FACU	species	x 4 =
				=Total Cov	er	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1						Preva	lence Index = B/	'A =
2						Lbudes	ophytic Vegetat	ian Indiantana.
3 4						-		drophytic vegetation
5							Dominance test	
6							Prevalence inde	
7.							Morphological a	daptations* (provide
8.						:	supporting data	in Remarks or on a
9							separate sheet)	
10							Problematic hyd	rophytic vegetation*
				=Total Cov	er		(explain)	
Woody Vine Stratum 1.	(Plot size:)					ors of hydric soil an unless disturbed c	d wetland hydrology must be or problematic
2				=Total Cov	er	Veg	drophytic getation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie			e sheet)					

NWB115A

_	N A - 4 - *		(days E. S.						
Depth	Matrix			dox Feat	1	1				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	ure	Remarks	
0-15	10YR 2/1	100					Cla	у		
15-17	10YR 2/1	80					Cla	у		
	2.5Y 5/3	20							Mixed Matrix	
17-24	2.5Y 5/3	50					Cla	у		
	10YR 2/1	25						-	Mixed Matrix	
	2.5Y 6/3	25							Mixed Matrix	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked \$	Sand Grains.	**Locatio	n: PL = Pore Lining, M = Matr	
Hydric Soil	Indicators:						Indicators	for Proble	matic Hydric Soils*:	
Histosol (A1)			Sai	Sandy Gleyed Matrix (S4)			Coas	t Prairie Rec	lox (A16) (LRR K, L, R)	
Histic Epipedon (A2)			Sai	ndy Redo	ox (S5)		Dark Surface (S7) (LRR K, L)			
Black Histic (A3)			Stri	ipped Ma	atrix (S6)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Hy	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very	Shallow Dar	k Surface (TF12)	
Str	atified Layers (A5)	Loa	amy Gley	ed Matrix	(F2)	Other	· (explain in	remarks)	
2 0	m Muck (A10)		De	pleted M	atrix (F3)					
De	pleted Below Dark	s Surfac	e (A11) Re	dox Dark	Surface	(F6)				
Th	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators	s of hydroph	ytic vegetation and wetland	
Sa	ndy Mucky Minera	al (S1)	Re	dox Depi	ressions (F8)			esent, unless disturbed or	
5 c	m Mucky Peat or	Peat (S	3)				problemat	ic		
Restrictive L	aver (if observed).								
	ayer (if observed):					Hvdric §	Soil Present	t? No	
Type: Depth (inches	· ·):			-		Hydric \$	Soil Present	t? <u>No</u>	
⁻ype: Depth (inches Remarks:	;;):):			-		Hydric S	Soil Present	t? <u>No</u>	
Type: Depth (inches Remarks:	GY				-		Hydric S	Soil Present	*? <u>No</u>	
Type: Depth (inches Remarks: HYDROLO Vetland Hyd	GY rology Indicators		equired: check a	Ill that an	- -					
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica	GY rology Indicators		equired; check a					ndary Indica	tors (minimum of two required	
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac	GY rology Indicators ators (minimum of e Water (A1)		equired; check a	Aquatic	Fauna (B	,		ndary Indica	tors (minimum of two required Soil Cracks (B6)	
ype: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2)		equired; check a	Aquatic True Aq	Fauna (B Juatic Plar	nts (B14)	<u>Seco</u>	ndary Indica Surface \$ Drainage	tors (minimum of two required Soil Cracks (B6) Patterns (B10)	
ype: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)		equired; check a	Aquatic True Aq Hydroge	Fauna (B Juatic Plar en Sulfide	nts (B14) Odor (C	<u>Seco</u> – 1) _	ndary Indica Surface \$ Drainage Dry-Seas	tors (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2)	
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		equired; check a	Aquatic True Aq Hydroge Oxidized	Fauna (B Juatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	<u>Seco</u> – 1) _	ndary Indica Surface S Drainage Dry-Seas Crayfish	tors (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)	
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surface High W Satura Water Sedimo	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (0	Fauna (B Juatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C oheres on	<u>Seco</u> - 1) - Living -	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatio	tors (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2)	
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Type: Depth (inchess Remarks: AtyDROLO Vetland Hyd Primary Indica Surface Unitation Satura Satura Satura Confit Do Algal M	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presenc	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on	Secor 	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatio Stunted c Geomorp	tors (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C or Stressed Plants (D1)	
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Type: Depth (inchess Remarks: Armarks: Armary Indica Drimary Indica Surface High W Satura Water Sedime Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	: one is r	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu	Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Secor 	ndary Indica Surface S Drainage Dry-Seas Crayfish Saturatio Stunted c Geomorp	tors (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C or Stressed Plants (D1) whic Position (D2)	
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Signature: DO



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Feature ID: NWB115

- Survey Area
 - Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



Project/Site:		FLAND DE		<pre> ION DAT //County: </pre>	• A FORM · Mart		st Region Sampling Date:	10/25/2022
Applicant/Owner:		Lake Charlot			State:	MN	Sampling Point:	
Investigator(s):	. <u>.</u>	Susan Mayer			tion, Townsh			.16 T103N R30W
Landform (hillslope,	terrace, etc.):	,	pression		l relief (conca			Concave
	1 Lat:	43.72		Long:	-94.43		Datum:	WGS84
Soil Map Unit Name		wanlake comp				VI Classific		NA
Are climatic/hydrolog	-	-					ain in remarks)	INA
Are vegetation	-	, or hydrold		-	ly disturbed?		normal circumsta	ances present? No
. .		, or hydrold						ny answers in remarks.)
Are vegetation SUMMARY OF	, soil FINDINGS	, or nyuron		_naturaliy p	roblematic?	(ii ne	eueu, explain a	ny answers in temarks.)
Hydrophytic Ve	egetation Presen	t? N	lo					
Hydric Soil Pre	sent?	Ν	lo	Is the	sampled are	a within a	wetland?	No
Wetland Hydro	logy Present?	Ye	es	If yes,	optional wetla	and site ID:	:	
Remarks:								
VEGETATION -	 Use scientif 	ic names of	•					
Taxa		00 \		Dominant	Indicator	Domir	nance Test Worl	ksheet
Tree Stratum 1.	(Plot size:	30)	% Cover	Species	Status		er of Dominant Sp	
2							e OBL, FACW, or Jumber of Domina	
3 4.						Specie	s Across All Strat	a: <u>1</u> (B)
5.							nt of Dominant Spe e OBL, FACW, or	
		45	、 <u> </u>	=Total Cov	/er	_		
Sapling/Shrub Stra	atum (Plot size:	15)				llence Index Wo	
1 2.							% Cover of:	Multiply by: x 1 = 0
3.							species 0 V species 0	x 1 = 0 x 2 = 0
3 4							species 0	$x^{2} = 0$
 5.							species 0	$- \frac{x + 3}{x + 4} = \frac{0}{0}$
···				=Total Cov	/er		species 40	$x = \frac{1}{x = 200}$
Herb Stratum	(Plot size:	5)				nn totals 40	(A) 200 (B)
1. Zea mays	(40	Y	UPL		lence Index = B/	_ () ()
2.								
3.						Hydro	ophytic Vegetati	on Indicators:
4							Rapid test for hy	drophytic vegetation
5							Dominance test	is >50%
6.							Prevalence inde	x is ≤3.0*
7							Morphological ad	daptations* (provide
8							supporting data	in Remarks or on a
9							separate sheet)	
10							Problematic hyd	rophytic vegetation*
			40	=Total Cov	/er		(explain)	
Woody Vine Stratu 1.	m (Plot size:)				ors of hydric soil an unless disturbed o	d wetland hydrology must be r problematic
2.							drophytic	
				_=Total Cov	/er		sent?	No
Remarks: (Include p	hoto numbers he	ere or on a ser	parate sheet)					
		·	,					
Agricultural field. Ba	re ground: 60%							

NWB116A

Depth	Matrix		R	Redox Features						
(Inches)	Color (moist)	%	Color (moist)			Loc**	Texture		Remarks	
0-36	10YR 2/1	100			Type*		Clay	/		
			10YR 5/8	10	С	Ы			Distinct or Drominant	
36-40	2.5Y 5/3	90	1018 5/6	10	C	PL	Clay	/	Distinct or Prominent	
*Type: C =	Concentration, D	= Deple	etion, RM = Red	uced Mat	rix, MS =	Masked S	Sand Grains.	**Location	: PL = Pore Lining, M = Matri	
Hydric Soil									natic Hydric Soils*:	
Histosol (A1)					ed Matrix	(S4)			ox (A16) (LRR K, L, R)	
	stic Epipedon (A2)			ndy Redo	. ,			Surface (S7)		
	ack Histic (A3)			ripped Ma	. ,			-	lasses (F12) (LRR K, L, R)	
	drogen Sulfide (A			-	ky Minera				s Surface (TF12)	
	ratified Layers (A5)			ed Matrix	: (F2)	Other	(explain in r	emarks)	
	cm Muck (A10)			pleted M						
	pleted Below Darl		· · · <u> </u>		Surface	. ,				
	ick Dark Surface (ark Surfac		*Indicators of hydrophytic vegetation and wetland			
	indy Mucky Minera	• •		edox Depi	ressions (F8)	hydrology problemati		sent, unless disturbed or	
50	cm Mucky Peat or	Peat (S	3)				problemati	C		
Restrictive L	ayer (if observed	l):								
Гуре:									D No	
Depth (inches Remarks:	s):						Hydric S	ioil Present	? <u>No</u>	
Remarks:							Hydric S	oil Present	? <u>NO</u>	
Remarks: HYDROLO	GY				-		Hydric S	oil Present	? <u>NU</u>	
Remarks: HYDROLO Wetland Hyd	GY Irology Indicators		required: check							
Remarks: HYDROLO Netland Hyd Primary Indic	GY Irology Indicators ators (minimum of		required; check			12)		dary Indicate	ors (minimum of two required	
Remarks: HYDROLO Wetland Hyd Primary Indica Surfac	GY Irology Indicators ators (minimum of e Water (A1)		required; check	Aquatic	Fauna (B			idary Indicato	ors (minimum of two required oil Cracks (B6)	
Remarks: HYDROLO Vetland Hyd Primary Indic: Surfac High V	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; check	Aquatic True Aq	Fauna (B uatic Plar	nts (B14)	<u>Secon</u>	dary Indicate Surface S Drainage	ors (minimum of two required oil Cracks (B6) Patterns (B10)	
Remarks: HYDROLO Netland Hyd Primary Indica Surfac High V Satura	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		equired; check	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C1	<u>Secon</u>	dary Indicate Surface S Drainage Dry-Sease	ors (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2)	
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Τt

Feature ID: NWB116

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

APPENDIX F: WETLAND CLASSIFICATION KEY

Cowardin Wetland Classification System

Systems	Subsystems	System Specific Classes
L - Lacustrine	(1) Limnetic(2) Littoral	RB, UB, AB, RS, US, EM,
P - Palustrine	None	RB, UB, AB, US, ML, EM, SS, FO
R - Riverine	(1) Tidal(2) Lower Perennial(3) Upper Perennial(4) Intermittent	RB, UB, SB, AB, RS, US, EM
Classes	Water Regimes	Special Modifiers
 RB - Rock Bottom UB - Unconsolidated Bottom SB - Streambed AB - Aquatic Bed RS - Rocky Shore US - Unconsolidated Shore EM - Emergent ML - Moss Lichen SS - Scrub Shrub FO - Forested 	 A – Temporarily flooded B – Seasonally saturated C – Seasonally flooded D – Continuously saturated E – Seasonally flooded/saturated F – Semi-permanently flooded G – Intermittently exposed H – Permanently flooded J – Intermittently flooded K – Artificially flooded 	 b - Beaver d - Partly drained/ditched f - Farmed m - Managed h - Diked/impounded r - Artificial substrate s - Spoil x - Excavated

Source: Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC. (FGDC 2013)

Circular 39 Wetland Classification System

Type and Definition	Approximate Cowardin Equivalents
Type 1: Seasonally flooded basin	PEMA, PFOA
Type 2: Meadow	PEMB
Type 3: Shallow marsh	PEMC, PEMF, PSSH, PUBA, PUBC
Type 4: Deep marsh	PEMF, PEMG, PEMH, PUBB, PUBF, PABF, PABG, L2US, L2EMF, L2EMG, L2ABF
Type 5: Shallow open water	L2ABG, L2ABH, L2EMA, L2EMB, L2EMH, L2RS, L2UB, PABH, PUBG, PUBH
Type 6: Shrub swamp	PSSA, PSSC, PSSF, PSSG, PSS1B, PSS5B, PSS6B
Type 7: Wooded swamp	PFO1B, PFO5B, PFO6B, PFOC, PFOF
Туре 8 : Вод	PFO2B, PFO4B, PFO7B, PSS2B, PSS3B, PSS4B, PSS7B

Source: Wetlands in Minnesota, Minnesota Board of Water and Soil Resources (BWSR n.d.)