



Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

Project/Site:	WETI Lake Ch	LAND DETER		ION DAT	A FORM Mar		st Region Sampling D	ate:	10/25/2022
Applicant/Owner:		Lake Charlotte So		···· • -	State:		Sampling P		WB085A
Investigator(s):		Susan Mayer		Sec	tion, Townsl	hip, Range:		Sec.21 T	103N R30W
Landform (hillslope, terra	ace, etc.):	Depressi	ion	Local	relief (conc	ave, convex	, none):		Concave
Slope (%): 2	Lat:	43.7163		Long:	-94.4		Datum:		WGS84
Soil Map Unit Name:	Canisteo-G	lencoe complex, (	) to 2 per	cent slopes	N	WI Classifica	ation:	F	PEM1Af
Are climatic/hydrologic c	onditions of th	ne site typical for t	his time c	of the year?			ain in remarl	(S)	
Are vegetation X	, soil	, or hydrology		Significant	y disturbed	? Are "	normal circu	mstances	present? No
Are vegetation	, soil	, or hydrology		-	roblematic?		eded, expla	ain any ar	swers in remarks.)
SUMMARY OF FIN						,	•	-	
Hydrophytic Vegeta	ation Present?	? Yes							
Hydric Soil Present	?	Yes		Is the s	sampled are	ea within a	wetland?		Yes
Wetland Hydrology	Present?	Yes		lf yes, o	optional wet	land site ID:		WB085	
Remarks:									
Recently harvested a									
VEGETATION Us	se scientific	•							
Tree Stratum (	Plot size:			Dominant Species	Indicator Status	Numbe	nance Test er of Dominar e OBL, FACV	nt Species	
3						Total N	lumber of Do	minant	(C)
4 5							nt of Dominar e OBL, FACV		%_ (A/B)
		、 <del>—</del>		=Total Cov	rer				4
Sapling/Shrub Stratum 1.	(Plot size:	)					Ilence Index % Cover of:		
2.							species	x 1	Multiply by: -
3.							V species		=
4.							species		=
5.							species		=
				=Total Cov	'er	UPL s	pecies	x 5	
Herb Stratum	(Plot size:	)				Colum	nn totals	(A	) (B)
1						Preva	lence Index	= B/A =	
2						Lluding	nhutia Vaa	atation In	diantara
3 4							phytic Veg		nytic vegetation
5							Dominance		
6							Prevalence		
7.							Morphologic	al adapta	tions* (provide
8.							supporting c	lata in Re	marks or on a
9.							separate sh	eet)	
10							Problematic	hydrophy	tic vegetation*
				=Total Cov	rer	<u>_X</u>	(explain)		
Woody Vine Stratum 1.	(Plot size:	)					ors of hydric so unless disture		and hydrology must be lematic
				=Total Cov	ver	Veg	drophytic getation sent?	Yes	
Remarks: (Include photo Harvested agricultural fie			e sheet)						

WB085A

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		
0-30	10YR 2/1	100					Clay			
30-38	2.5Y 3/1	100					Clay			
							-			
38-40	5Y 6/2	100					Clay			
			<u> </u>							
	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked		on: PL = Pore Lining, M = Matrix		
Hydric Soil			9			(0.1)		ematic Hydric Soils*:		
	stosol (A1)				ed Matrix	(S4)		dox (A16) (LRR K, L, R)		
	stic Epipedon (A2)			ndy Redo			Dark Surface (S			
	ack Histic (A3)			ipped Ma	• •			Masses (F12) (LRR K, L, R)		
	drogen Sulfide (A	,		•	ky Minera	. ,		rk Surface (TF12)		
	atified Layers (A5	)			ed Matrix	(⊦2)	Other (explain in	remarks)		
	m Muck (A10)	~ <i>(</i>			atrix (F3)					
	pleted Below Darl		· · /		Surface	· · ·				
	ick Dark Surface (				ark Surfac			nytic vegetation and wetland		
	ndy Mucky Minera			dox Depr	ressions (	F8)	problematic	esent, unless disturbed or		
	ayer (if observed	):								
Туре:					-		Hydric Soil Preser	t? Yes		
Depth (inches	):				_					
Remarks:										
HYDROLO	<u>cv</u>									
	rology Indicators									
-	ators (minimum of		equired: check a	all that an	(vla		Secondary Indica	ators (minimum of two required)		
-	e Water (A1)				Fauna (B	(13)		Soil Cracks (B6)		
					uatic Plar	,				
	/ater Table (A2) tion (A3)			- '	en Sulfide	( /	0	e Patterns (B10) son Water Table (C2)		
	Marks (B1)				d Rhizosp		· ·	Burrows (C8)		
	ent Deposits (B2)			Roots (C		neres or	<u> </u>	on Visible on Aerial Imagery (C9)		
	eposits (B3)			-	ce of Redu	uced Iron		or Stressed Plants (D1)		
	lat or Crust (B4)			-			. ,	phic Position (D2)		
Iron De	eposits (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	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):	10/2			
Water Table F		Yes	No	Х	Depth (ii		VV€	tland Hydrology Present?		
Saturation Pre		Yes	No	Х	Depth (ii	nches):		Yes		
(includes capi										
Describe Rec	orded Data (strea	m gauge	e, monitoring we	II, aerial p	onotos, pr	evious in	spections), if available:			
Remarks:										
n comanto.										

Project/Site:	WET Lake Ch	LAND DETER		DN DAT	A FORM · Mari		t Region Sampling Da	ato.	10/25/2022
Applicant/Owner:		Lake Charlotte So		ounty.	State:		Sampling Po		WB085B
Investigator(s):		Susan Mayer		Secti	ion, Townsh			Sec.21 T103	
Landform (hillslope, terra		Hillslop	۵		relief (conca				onvex
Slope (%): 3	Lat:	43.71614		Long:	-94.43		Datum:		GS84
Soil Map Unit Name:		Glencoe complex, (	) to 2 perce	· -				N	
Are climatic/hydrologic cc							ain in remark		n
		, or hydrology		-	y disturbed?	· · ·		nstances pre	esent? No
		, or hydrology			oblematic?				vers in remarks.)
			·'		obiematie	(ii not	cucu, cxpia	in any answ	
Hydrophytic Vegetat	tion Present	? No							
Hydric Soil Present?	?	No		Is the s	ampled are	a within a	wetland?	N	ο
Wetland Hydrology	Present?	No		lf yes, o	ptional wetl	and site ID:		NB085	
Remarks:									
Recently harvested ac	pricultural fie	ld.							
VEGETATION Us	e scientifi	c names of pla	nts.						
			Absolute D		Indicator	Domin	ance Test V	Vorksheet	
Tree Stratum         (F           1.	Plot size:	)	% Cover	Species	Status		r of Dominan OBL, FACW		0 (A)
2 3							umber of Dor s Across All S		0 (B)
5							t of Dominant OBL, FACW		%(A/B)
		_	=	Total Cove	er				
Sapling/Shrub Stratum	(Plot size:	)						Worksheet	
							% Cover of:		ltiply by:
-							pecies		
3							' species pecies		
4 5.							species		
0			=	Total Cove	er		pecies	x 5 =	
Herb Stratum	(Plot size:	) —					n totals	(A)	(B)
1	X	/					ence Index :	· · ·	( )
2									
3						-		etation Indic	
								r hydrophytic	c vegetation
							Dominance t	est is >50% ndex is ≤3.0'	k
7								al adaptation	
8.								ata in Rema	
9.							separate she		
10.								hydrophytic	vegetation*
				Total Cov	er		(explain)	, , ,	0
Woody Vine Stratum 1.	(Plot size:	)				*Indicato	rs of hydric so	il and wetland ed or problem	hydrology must be atic
			=	Total Cove	er	Veg	rophytic etation sent?	<u>No</u>	
Remarks: (Include photo Harvested agricultural fiel			e sheet)						

WB085B

Profile Descr	iption: (Describe	e to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth	Matrix Redox Features									
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-8	10YR 2/1	100			51		Clay			
							-			
8-14	10YR 2/1	40					Clay			
	2.5Y 6/4	30						Mixed Matrix		
	2.5Y 4/3	30						Mixed Matrix		
14-20	2.5Y 6/4	98	2.5Y 6/8	2	С	PL	Clay	Distinct or Prominent		
					-		,			
*Type: C =	Concentration, D	= Deple	etion, RM = Redu	ced Mat	rix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:		
-	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)		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)			-	atrix (S6)			Masses (F12) (LRR K, L, R)		
	drogen Sulfide (A	4)		• •	ky Minera	al (F1)		rk Surface (TF12)		
	atified Layers (A5	,		2	ed Matrix	. ,	Other (explain in			
	m Muck (A10)	,		• •	atrix (F3)	( )		<b>,</b>		
	pleted Below Darl	k Surfac			Surface	(F6)				
	ick Dark Surface (				ark Surfac		*I			
	ndy Mucky Minera	. ,			ressions (			nytic vegetation and wetland esent, unless disturbed or		
	m Mucky Peat or				03310113 (	10)	problematic			
	-		0)			1				
	ayer (if observed	l):								
	Type: Hydric Soil Present? No									
Depth (inches	s): 				-					
Remarks:						1				
HYDROLO	GY									
Wetland Hyd	rology Indicators	S:								
-	ators (minimum of		equired; check a	II that ap	ply)		Secondary Indica	ators (minimum of two required)		
Surface	e Water (A1)			Aquatic	Fauna (B	(13)	Surface	Soil Cracks (B6)		
	/ater Table (A2)				uatic Plar			e Patterns (B10)		
Ŭ	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)				ce of Redu	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)				
	ly Vegetated Con				or Well Da					
	Stained Leaves (E		. ,		Explain in		3)			
Field Observ	ations:	,			•		, 			
Surface Wate		Yes	No	х	Depth (ii	nches).				
Water Table F		Yes	No	X	Depth (ii		We	tland Hydrology		
Saturation Pre		Yes	No	X	Depth (ii			Present? No		
(includes capi					(n	· · · · · ·				
· · ·		m gaude	e, monitoring we	l, aerial r	photos, pr	evious in	spections), if available:			
		5 0	0	'	<i>.</i> .					
Remarks:										







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:3,500

	WETI	LAND DETER	RMINAT	ON DATA	FORM -	Midwes	at Regio	n		
Project/Site:	Lake Ch	arlotte	City/	County:	Marti	n	Sampling	Date:	10/25	/2022
Applicant/Owner:	I	Lake Charlotte S	olar, LLC		State:	MN	Sampling	Point:	WBC	)87A
Investigator(s):	Ś	Susan Mayer		Sectio	n, Townshi	p, Range:		Sec.21 T	103N R3	W0
Landform (hillslope, terrace,	, etc.):	Broad Dep	ression	Local re	elief (conca	ve, convex	, none):		Concave	e
Slope (%): 1	Lat:	43.71033		Long:	-94.44	144	Datum:		WGS84	•
Soil Map Unit Name: G	Blencoe cla	ay loam, 0 to 1 pe	ercent slop	es	NW	I Classific	ation:		NA	
Are climatic/hydrologic cond	litions of th	ne site typical for	this time of	of the year?	Yes (	(If no, expla	ain in rema	arks)		
Are vegetation X ,	soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	cumstances	present	? No
Are vegetation ,	soil	, or hydrology		naturally pro	blematic?	(If ne	eded, exp	lain any ar	nswers in	n remarks.)
SUMMARY OF FINDI	NGS									
Hydrophytic Vegetatior	n Present?	? Yes								
Hydric Soil Present?		Yes		Is the sa	mpled area	a within a	wetland?		Yes	
Wetland Hydrology Pre	esent?	Yes		lf yes, op	tional wetla	and site ID:		WB087		
Remarks:										
Recently tilled agricultural		-		al field.						
VEGETATION Use	scientific	c names of pla		Deminent	la dia ata a	Domin		+ \ <b>A</b> / = = -= -=		
Tree Stratum (Plot	:	λ.		Dominant Species	Indicator	Domir	nance les	t Workshee	et	
1. (Plot	t size:	)	% Cover	Species	Status			ant Species	0	(4)
2						that are	e OBL, FAC	CW, or FAC:	0	(A)
3.							lumber of E s Across A		0	(B)
4 5.								ant Species	%	(A/P)
J				=Total Cove	•	that are	e OBL, FAC	CW, or FAC:	/0	(A/B)
Sapling/Shrub Stratum (	Plot size:	)				Preva	lence Ind	ex Worksh	eet	
<u></u> (	-	/					% Cover o		Multiply	by:
2.						OBL s	species		=	•
3.						FACW	V species	x 2		
4.						FAC s	species	х 3	=	
5.						FACU	species		=	
				=Total Cove	r	UPL s	pecies	x 5	=	
Herb Stratum (	Plot size:	)				Colum	nn totals	(A	)	(B)
1						Preva	lence Inde	x = B/A =		
2						_				
3.								getation In		
4							•	for hydroph	, ,	etation
5 6.								e test is >50 e index is ≤		
7								ical adapta		rovide
8.								data in Re		
9.							separate s			
10.							•	, ic hydrophy	tic veget	ation*
				=Total Cove	r		(explain)		•	
Woody Vine Stratum (	-	)				*Indicato	ors of hydric	soil and wetla		logy must be
2.				=Total Cove	r	Veg	drophytic jetation sent?			

WB087A

Profile Descr	iption: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth	Matrix		Redox Features							
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-10	10YR 2/1	98	10YR 4/4	2	С	PL	Clay	Distinct or Prominent		
10-15	10YR 2/1	100					Clay			
10-13	1011(2/1	100					Oldy			
			<u> </u>							
,,	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked S		on: PL = Pore Lining, M = Matrix		
Hydric Soil						(2.1)	Indicators for Proble	•		
	stosol (A1)				ed Matrix	(S4)		dox (A16) (LRR K, L, R)		
	stic Epipedon (A2)			ndy Redo			Dark Surface (S7			
	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)	Other (explain in	remarks)		
	m Muck (A10)	0(			atrix (F3)	(50)				
	pleted Below Darl		· · · <u> </u>							
	ick Dark Surface (				ark Surfac			nytic vegetation and wetland		
	ndy Mucky Minera			dox Depr	essions (	F8)	problematic	esent, unless disturbed or		
50	m Mucky Peat or	Peat (S	3)			n	F			
Restrictive L	ayer (if observed	):								
Туре:							Hydric Soil Presen	t? Yes		
Depth (inches	s):									
Remarks:										
HYDROLO										
-	rology Indicators		a au tina alta a la a alta a		-		Conservations, la disc			
-	ators (minimum of	one is r	equirea; check a			40)		tors (minimum of two required)		
	e Water (A1)			-	Fauna (B			Soil Cracks (B6)		
°	/ater Table (A2)			- '	uatic Plar	` '		e Patterns (B10)		
	tion (A3)				en Sulfide			son Water Table (C2)		
	Marks (B1) ent Deposits (B2)				d Rhizosp	oneres on	· _ ·	Burrows (C8) on Visible on Aerial Imagery (C9)		
	eposits (B3)			Roots (C	e of Red	iced Iron		or Stressed Plants (D1)		
	Aat or Crust (B4)			-			· · · ·	phic Position (D2)		
	eposits (B5)		х	(C6)				utral Test (D5)		
	tion Visible on Ae	rial Imad			ck Surfac	e (C7)				
	ly Vegetated Con			-	or Well Da	. ,				
Water-	Stained Leaves (E	39)			Explain in		3)			
Field Observ	ations:			-						
Surface Wate		Yes	No	х	Depth (ii	nches):				
Water Table F	Present?	Yes	No	Х	Depth (ii	· -	We	tland Hydrology		
Saturation Pre	esent?	Yes	No	Х	Depth (ii			Present? Yes		
(includes capi	llary fringe)									
Describe Rec	orded Data (strea	m gauge	e, monitoring we	ll, aerial p	photos, pr	evious in	spections), if available:			
Remarks:										

r hydrology r hydrology <u>No</u> <u>No</u> <u>mes of plar</u> A	cent slop nis time c	Local Long:	-94.44 NW Yes ( y disturbed? roblematic?	MN Samp o, Range: re, convex, none 17 Datu I Classification: I no, explain in in Are "norma (If needed, within a wetlan	Im: WGS84 NA remarks) al circumstances present? No , explain any answers in remarks. Ind? No WB087
h_Mayer Plain 43.7105 am, 0 to 1 period e typical for the r hydrology r hydrology No No No No Mo No No A	cent slop nis time c	Local Long:	ion, Townshi relief (conca -94.44 NW Yes ( y disturbed? oblematic?	o, Range: /e, convex, none // Datu / Classification: f no, explain in in Are "norma (If needed, within a wetland nd site ID:	Sec.21 T103N R30W e): None m: WGS84 NA remarks) al circumstances present? No , explain any answers in remarks. nd? No WB087
Plain 43.7105 am, 0 to 1 pero e typical for th r hydrology r hydrology No No No No Mo A	cent slop nis time c	Local Long:	relief (conca -94.44 NW Yes( y disturbed? roblematic? coblematic?	re, convex, none 17 Datu 1 Classification: f no, explain in Are "norma (If needed, within a wetlan nd site ID:	e): None Im: WGS84 INA remarks) al circumstances present? No , explain any answers in remarks Ind? No WB087
43.7105 am, 0 to 1 pero e typical for th r hydrology r hydrology <u>No</u> <u>No</u> <u>No</u> <u>No</u> <u>No</u> <u>A</u>	cent slop nis time c	Long: bes of the year? Significantl naturally pr Is the s If yes, c Dominant	-94.44 NW Yes ( y disturbed? oblematic?	I 7 Datu I Classification: f no, explain in r Are "norma (If needed, within a wetlan	Im: WGS84 NA remarks) al circumstances present? No , explain any answers in remarks. Ind? No WB087
am, 0 to 1 pero e typical for th r hydrology r hydrology <u>No</u> <u>No</u> <u>Mo</u> <u>No</u> <u>Mes of plar</u> A	nis time c	bes of the year? Significantl naturally pr Is the s If yes, c	NW Yes ( y disturbed? oblematic?	I Classification: f no, explain in r Are "norma (If needed, within a wetland a site ID:	NA remarks) al circumstances present? <u>No</u> , explain any answers in remarks nd? <u>No</u> WB087
e typical for th r hydrology r hydrology <u>No</u> <u>No</u> <u>mes of plar</u> A	nis time c	f the year? Significantl naturally pr Is the s If yes, c	Yes ( y disturbed? oblematic? ampled area optional wetla	f no, explain in r Are "norma (If needed, within a wetland a site ID:	remarks) al circumstances present? <u>No</u> , explain any answers in remarks nd? <u>No</u> WB087
r hydrology r hydrology <u>No</u> <u>No</u> <u>Mes of plar</u> A	nts.	Significantl naturally pr Is the s If yes, c	y disturbed? oblematic? ampled area optional wetla	Are "norma (If needed, within a wetland	al circumstances present? <u>No</u> , explain any answers in remarks nd? <u>No</u> <u>WB087</u>
r hydrology No No mes of plar	nts.	Is the solution of the solutio	ampled area	(If needed,	, explain any answers in remarks nd? <u>No</u> WB087
No No No mes of plar	nts.	Is the s If yes, c Dominant	ampled area	m <b>within a wetla</b>	nd? <u>No</u> WB087
No No mes of plar	bsolute	If yes, o	optional wetla	nd site ID:	WB087
No mes of plar	bsolute	If yes, o	optional wetla	nd site ID:	WB087
mes of plar	bsolute	Dominant	, 		
A	bsolute		Indicator	Dominance	
A	bsolute		Indicator	Dominance	
A	bsolute		Indicator	Dominance	<b>T</b> (111 ) (
			Indicator	Dominance	
		Species	Status	Number of Do	ominant Species , FACW, or FAC: 0 (A)
					r of Dominant
					ominant Species , FACW, or FAC: <u>%</u> (A/B)
·		=Total Cov	er	Provalonco	Indox Workshoot
)					
					1,5,5
				FAC species	
				FACU speci	
		=Total Cov	er	UPL species	s x 5 =
)				Column tota Prevalence	als(A)(B) Index = B/A =
					ic Vegetation Indicators: I test for hydrophytic vegetation
				Domir	nance test is >50%
				Preva	lence index is ≤3.0*
					nological adaptations* (provide
					orting data in Remarks or on a
					ate sheet)
		Tatal Oa			ematic hydrophytic vegetation*
)		= I otal Cov	er	*Indicators of h	an) ydric soil and wetland hydrology must b s disturbed or problematic
		=Total Cov	er	Hydrophy Vegetatic Present?	on
	)	)	=Total Cov	=Total Cover	Image: Species Across Species Acros

WB087B

Profile Descr	iption: (Describe	to the	depth needed	to docum	ent the i	ndicator	or confirm the absence	of indicators.)			
Depth	Matrix		R	edox Fea	tures						
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks			
0-32	10YR 2/1	100					Clay				
32-40	2.5Y 5/3	70					Sandy Clay				
02.10								Mixed Matrix			
	10YR 2/1	30						Mixed Matrix			
	Concentration, D	= Deple	tion, RM = Red	uced Mat	rix, MS =	Masked		on: PL = Pore Lining, M = Matrix			
Hydric Soil			0			(0.1)		ematic Hydric Soils*:			
	stosol (A1)				ed Matrix	(S4)		dox (A16) (LRR K, L, R)			
	stic Epipedon (A2)			andy Redo	. ,		Dark Surface (S				
	ack Histic (A3)			ripped Ma	• • •			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)	~ ~		epleted M							
	pleted Below Darl		. ,		Surface	. ,					
	ick Dark Surface (			•	ark Surfac	. ,	*Indicators of hydrophytic vegetation and wetland				
	ndy Mucky Minera	` '		edox Depi	ressions (	F8)	hydrology must be present, unless disturbed or problematic				
50	m Mucky Peat or	Peat (S	3)				provionistic				
Restrictive La	ayer (if observed	l):									
Туре:					-		Hydric Soil Presen	t? <u>No</u>			
Depth (inches	s):				-						
HYDROLO	GY										
	rology Indicators	5:									
Primary Indica	ators (minimum of	one is r	equired; check	all that ap	oply)		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)			
	tion (A3)			_	en Sulfide			son Water Table (C2)			
Water	Marks (B1)			Oxidize	d Rhizosp	heres on	Living Crayfish	Burrows (C8)			
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)			
·	eposits (B3)			-	ce of Redu			or Stressed Plants (D1)			
	lat or Crust (B4)				Iron Redu	uction in T		phic Position (D2)			
	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)			
	tion Visible on Ae			_	ick Surfac	. ,					
	ly Vegetated Con		irface (B8)	-	or Well Da						
vvater-	Stained Leaves (E	39)		_ Other (E	Explain in	Remarks	s)				
Field Observ											
Surface Wate		Yes	No	<u> </u>	Depth (ii		We	tland Hydrology			
Water Table F Saturation Pre		Yes	No	X X	Depth (ii	_		Present?			
(includes capi		Yes	No	X	Depth (ii	iches):		No			
		m nauga	e monitoring w	a aerial r	hotos pr	evious in	spections), if available:				
Dooonbe Neu		yauyt	s, monitoring we	n, uchai j							
Remarks:											







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,500

	WET	LAND DETER		ION DATA	FORM -	Midwes	t Regio	n		
Project/Site:	Lake Cl	harlotte	City/	County:	Marti	n	Sampling	Date:	10/25/2	2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	WB08	38A
nvestigator(s):		Susan Mayer		Section	on, Townshi	p, Range:		Sec.21 T	103N R30	W
Landform (hillslope, terra	ce, etc.):	Broad Dep	ression	Local r	elief (conca	ve, convex	, none):		Concave	
Slope (%): 2	Lat:	43.71283		Long:	-94.440	054	Datum:		WGS84	
Soil Map Unit Name:	Canisteo-0	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classifica	ation:		NA	
Are climatic/hydrologic co	nditions of t	the site typical for	this time c	of the year?	Yes (	If no, expla	ain in rema	arks)		
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	cumstances	present?	No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, exp	lain any ar	swers in	remarks.)
SUMMARY OF FIN	DINGS									
Hydrophytic Vegetat	tion Present	t? Yes								
Hydric Soil Present?	>	Yes		Is the sa	ampled area	a within a	wetland?		Yes	
Wetland Hydrology	Present?	Yes		lf ves. or	otional wetla	nd site ID:		WB088		-
Remarks:										
Recently tilled agricultu		-	-	al field.						
VEGETATION Us	e scientifi	•		Dominant	Indicator	Domir	anaa Taa	t Workshee		
Tree Stratum (F	Plot size:	)		Species	Status	Domin	lance res	tworksnee	ŧ	
1.	101 5120.	)		Species	Status			ant Species	0	(A)
2						that are	e OBL, FAC	CW, or FAC:		(A)
3.							lumber of D s Across Al		0	(B)
4 5								ant Species CW, or FAC:	%	(A/B)
		-		=Total Cove	r					
Sapling/Shrub Stratum	(Plot size:	)						ex Workshe		
1							% Cover of		Multiply b	•
							species	X 1	=	
3							v species	X 2	=	
4 5.							species species		= =	
5				=Total Cove	r			× 4 x 5	-	
Herb Stratum	(Plot size:	) -			•1		nn totals	× 3 (A)		(B)
1.	(11010120.	/					lence Inde			(D)
2.								-		
3.						Hydro	phytic Ve	getation In	dicators	:
4.								for hydroph		
5.							Dominance	e test is >50	)%	
6.							Prevalence	e index is ≤3	3.0*	
7						_	Morpholog	ical adaptat	ions* (pro	ovide
8							supporting	data in Rer	marks or o	on a
9							separate s			
10								ic hydrophy	tic vegeta	ition*
Woody Vine Stratum	(Plot size:	)		=Total Cove	r		(explain) ors of hydric	soil and wetla	and hydrolo	ogy must be
1						present,	unless distu	irbed or probl	ematic	
				=Total Cove	r	Veg	drophytic getation sent?	Yes		
Remarks: (Include photo Recently tilled agricultura			te sheet)							

WB088A

Profile Descr	iption: (Describe	e 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
0-20	10YR 2/1	100					Clay	
20.20	2 EV 2/1	00	EV E/2	2	С	PL	-	Distinct or Prominant
20-30	2.5Y 3/1	98	5Y 5/3	2	ι L	PL	Clay	Distinct or Prominent
30-36	2.5Y 4/2	80	2.5Y 5/1	15	D	М	Clay	
			2.5Y 6/8	5	С	PL		Distinct or Prominent
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mati	rix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils*:
His	stosol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)	)	Sar	ndy Redo	ox (S5)		Dark Surface (S7	') (LRR K, L)
Bla	ack Histic (A3)		Stri	pped 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)
	atified Layers (A5	,	Loa	amy Gley	ed Matrix	(F2)	Other (explain in	. ,
	m Muck (A10)	,		• •	atrix (F3)	· · ·	、 .	,
De	pleted Below Darl	k Surfac			Surface	(F6)		
	ick Dark Surface (			oleted Da	ark Surfac	ce (F7)	*Indiantara of hydroph	nytic vegetation and wetland
	ndy Mucky Minera				ressions (		, j	esent, unless disturbed or
	m Mucky Peat or			aon bop.		,	problematic	
	-		-,					
	ayer (if observed	l):						
Type:	<u>`````````````````````````````````````</u>				-		Hydric Soil Presen	t? Yes
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	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)
Sedime	ent Deposits (B2)			Roots (0			· · ·	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presenc	ce of Redu	uced Iron	n (C4) Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	iction in <sup>-</sup>	Tilled Soils X Geomor	ohic Position (D2)
Iron De	eposits (B5)			(C6)			FAC-Net	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	e (C7)		
Sparse	ly Vegetated Con	cave Su	Irface (B8)	Gauge of	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	6)	
Field Observa	ations:							
Surface Water	r Present?	Yes	No	Х	Depth (ii			tland Hydrology
Water Table F		Yes	No	Х	Depth (ii		vve	tland Hydrology Present?
Saturation Pre		Yes	No	Х	Depth (ii	nches):		Yes
(includes capi								
Describe Reco	orded Data (strea	m gauge	e, monitoring wel	i, aerial p	onotos, pr	evious in	spections), if available:	
Domerly								
Remarks:								

Project/Site:	WETL Lake Cha	AND DETER		ION DAT	• FORM - Marti		t Regior Sampling		10/25/2022
Applicant/Owner:		ake Charlotte Sc			State:		Sampling		WB088B
nvestigator(s):		usan Mayer	,	Secti	on, Townshi				103N R30W
Landform (hillslope, terra		Hillslop	)e		relief (conca		none):	000.211	None
Slope (%): 3	Lat:	43.71264		Long:	-94.44		Datum:		WGS84
Soil Map Unit Name:		encoe complex,	0 to 2 per				-		NA
Are climatic/hydrologic cc						If no, expla		rks)	
		, or hydrology			/ disturbed?	· · ·		umstances	present? No
·		, or hydrology			oblematic?				nswers in remarks.)
		_, or hydrology			oblematic:	(II He	eueu, exp	an any a	
Hydrophytic Vegetat	tion Present?	Yes							
Hydric Soil Present?	)	Yes		Is the s	ampled are	a within a	wetland?		No
Wetland Hydrology I	Present?	No		lf yes, o	ptional wetla	nd site ID:		WB088	
Remarks:					-				
Recently harvested ag	pricultural field	1.							
VEGETATION Us	e scientific	names of pla	ints.						
				Dominant	Indicator	Domin	ance Test	Workshe	et
Tree Stratum         (F           1.	Plot size:	)	% Cover	Species	Status			ant Species W, or FAC:	(A)
2 3							umber of D s Across Al		(B)
5							t of Domina OBL. FAC	Int Species W, or FAC:	% (A/B)
				=Total Cove	ər			,	、 、
Sapling/Shrub Stratum	(Plot size:	)				Preva	lence Inde	x Worksh	eet
1						Total 9	% Cover of	:	Multiply by:
2.						OBL s	pecies		=
3							/ species		=
4							pecies		=
5				<b>T</b> ( ) O			species _		=
		、—		=Total Cove	er		pecies _		
Herb Stratum	(Plot size:	)					n totals	(A	)(B)
1						Preval	lence Index	K = B/A = -	
2 3.						Hydro	nhytic Vo	getation Ir	dicators
Δ								-	nytic vegetation
5								e test is >50	-
6								e index is ≤	
7.						·	Morpholog	ical adapta	tions* (provide
8.							supporting	data in Re	marks or on a
9.						:	separate sl	heet)	
10.						ı	Problemati	c hydrophy	tic vegetation*
				=Total Cove	ər	X	(explain)		
Woody Vine Stratum 1.	(Plot size:	)						soil and wetl rbed or prob	and hydrology must be lematic
		_		=Total Cove	ər	Veg	Irophytic etation sent?	Yes	
Remarks: (Include photo Harvested agricultural fiel			e sheet)						

WB088B

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)				
Depth <u>Matrix</u>				dox Feat	tures							
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks				
0-17	10YR 2/1	100					Clay					
17-22	2.5Y 4/2	90	2.5Y 6/2	7	D	м	Sandy Clay					
17-22	2.31 4/2	90					Sandy Clay					
			10YR 6/8	3	С	PL		Distinct or Prominent				
*Type: C =	Concentration, D	= Deple	etion, 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)			ndy Redo			Dark Surface (S7	7) (LRR K, L)				
Bla	ck Histic (A3)		Str	ipped Ma	atrix (S6)			Masses (F12) (LRR K, L, R)				
,	drogen Sulfide (A	,		•	ky Minera	. ,	*	Shallow Dark Surface (TF12)				
	atified Layers (A5	)			ed Matrix	(F2)	Other (explain in	r (explain in remarks)				
	m Muck (A10)				atrix (F3)							
	pleted Below Dar				Surface	``						
	ck Dark Surface (	. ,			ark Surfac			nytic vegetation and wetland				
	ndy Mucky Minera			dox Depr	essions (	(F8)		esent, unless disturbed or				
5 c	m Mucky Peat or	Peat (S	3)				problematic					
Restrictive La	ayer (if observed	l):										
Type: Rock	ζ				_		Hydric Soil Presen	t? Yes				
Depth (inches	): 22				_							
Remarks:												
Remarks.												
HYDROLO	GY											
	ology Indicators	3:										
•	itors (minimum of		equired; check a	II that ap	ply)		Secondary Indica	ators (minimum of two required)				
-	e Water (A1)		• •		Fauna (B	313)		Soil Cracks (B6)				
	ater Table (A2)				uatic Plar	,						
0	ion (A3)				en Sulfide	. ,		son Water Table (C2)				
	Marks (B1)				d Rhizosp		· ·	Crayfish Burrows (C8)				
	ent Deposits (B2)			Roots (0		N Visible on Aerial Imagery (C9)						
	eposits (B3)			Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1								
Algal M	lat or Crust (B4)			Recent Iron Reduction in Tilled Soils Geomorphic Position (D2)								
Iron De	posits (B5)			(C6)			FAC-Nei	utral Test (D5)				
Inunda	tion Visible on Ae	rial Ima	gery (B7)	-	ick Surfac	. ,						
Sparse	ly Vegetated Con	cave Su	Irface (B8)	Gauge of	or Well Da	ata (D9)						
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	5)					
Field Observa	ations:											
Surface Wate		Yes	No	Х	Depth (ii	· _	10/0	tland Hydrology				
Water Table F		Yes	No	Х	Depth (ii		vve	Present?				
Saturation Pre		Yes	No	Х	Depth (ii	nches):		No				
(includes capi				1	1							
Describe Reco	orded Data (strea	m gauge	e, monitoring wel	i, aerial p	photos, pr	evious in	spections), if available:					
Remarke												
Remarks:												







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

	WET	LAND DETER	MINAT	ION DAT	FORM -	Midwes	st Regio	า	
Project/Site:	Lake Ch	arlotte	City/County: Martin			Sampling Date:			10/25/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	WB089A
Investigator(s):		Susan Mayer		Secti	on, Townshij	p, Range:		Sec.21 T	103N R30W
Landform (hillslope, terrac	e, etc.):	Depress	sion	Local	relief (concav	ve, conve	k, none):		Concave
Slope (%): 2	Lat:	43.71266		Long:	-94.443	328	Datum:		WGS84
Soil Map Unit Name:	Crippin loa	m, 1 to 3 percent	slopes		NW	I Classific	ation:		NA
Are climatic/hydrologic cor	nditions of t	he site typical for	this time o	of the year?	Yes (	If no, expl	ain in rema	rks)	
Are vegetation X	, soil	, or hydrology		Significantly	/ disturbed?	Are "	normal circ	umstance	s present? No
Are vegetation	, soil	, or hydrology		naturally pr	oblematic?	(If ne	eded, exp	lain any a	nswers in remarks.)
SUMMARY OF FIND	NGS								
Hydrophytic Vegetati	on Present'	? Yes							
Hydric Soil Present?		Yes		Is the s	ampled area	a within a	wetland?		Yes
Wetland Hydrology P	'resent?	Yes		lf yes, o	ptional wetla	nd site ID:	:	WB089	
Remarks:									
Recently tilled agricultur			0	ral field.					
VEGETATION Use	scientifi			Dominant	Indicator	Domi	nance Tes	Worksho	ot
Tree Stratum (PI	lot size:	)		Species	Status	Domin	lance res	WOIKSIN	CL.
1.		/		Opeoleo	Olalus		er of Domina e OBL, FAC		<b>0</b> (A)
2									(/ )
3.							lumber of D s Across Al		(B)
4 5.							t of Domina		
5				=Total Cove	٥r	that ar	e OBL, FAC	W, or FAC	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:	) -				Preva	lence Inde	ex Worksh	eet
1.	(· ···· ·····	,					% Cover of		Multiply by:
2.						OBL	species	х́	=
3.						FACV	V species	x 2	2 =
4						FAC s	species	x 3	3 =
5							l species	x 4	! =
		-		=Total Cove	er	UPLs	species	x 8	
Herb Stratum	(Plot size:	)					nn totals		A)(B)
1						Preva	lence Inde	x = B/A =	
						Lbrahn		watation I	
3 4								-	ndicators: hytic vegetation
5							Dominance	• •	
6							Prevalence		
7.							Morpholog	ical adapta	ations* (provide
8.							supporting	data in Re	emarks or on a
9							separate s	heet)	
10							Problemat	c hydroph	vtic vegetation*
				=Total Cove	er	<u>_X</u>	(explain)		
Woody Vine Stratum 1.	-	)					ors of hydric unless distu		land hydrology must be blematic
2				=Total Cove	<u>ə</u> r		drophytic getation		
					21	-	sent?	Yes	
Remarks: (Include photo n	umbers he	re or on a separa	te sheet)						
Recently tilled agricultural	field. Bare	ground: 100%							

WB089A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)				
Depth <u>Matrix</u>				dox Feat	tures							
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks				
0-25	10YR 2/1	100					Clay					
25-40	10YR 2/1	90	2.5Y 5/2	5	D	М	Clay					
20 40	1011(2/1	50					City					
			2.5Y 6/4	5	С	PL		Distinct or Prominent				
						l						
31	Concentration, D	= Deple	etion, RM = Redu	ced Mati	rix, MS =	Masked		on: PL = Pore Lining, M = Matrix				
Hydric Soil Indicators:         Indicators for Problematic Hydric Soils*:           Histosol (A1)         Sandy Gleyed Matrix (S4)         Coast Prairie Redox (A16) (LRR K, L, R)												
	stosol (A1)					(54)		dox (A16) (LRR K, L, R)				
	stic Epipedon (A2)			ndy Redo			Dark Surface (S7					
	ack Histic (A3) drogen Sulfide (A	4)			atrix (S6) ky Minera			-Manganese Masses (F12) (LRR K, L, R) / Shallow Dark Surface (TF12)				
	atified Layers (A5	,		•	ed Matrix	. ,	X Other (explain in	( )				
	m Muck (A10)	)			atrix (F3)	(Г2)		Temarks)				
	pleted Below Darl	k 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					
			0)			r						
	ayer (if observed	l):										
Type:	\				-		Hydric Soil Presen	t? Yes				
Depth (inches	·)·				-							
Remarks:												
A12 Assumed	d											
HYDROLO												
-	rology Indicators		a guira du aba alca	ll that an	nh ()		Cocondon Indico	tors (minimum of two required)				
-	ators (minimum of	one is i	equired; check a			40)		tors (minimum of two required)				
	e Water (A1)				Fauna (B			Soil Cracks (B6)				
	/ater Table (A2)				uatic Plai			Patterns (B10)				
	tion (A3)				en Sulfide	•	· ·	Dry-Season Water Table (C2) Crayfish Burrows (C8)				
	Marks (B1) ent Deposits (B2)				d Rhizosp	oneres on	· ·	X Saturation Visible on Aerial Imagery (C9)				
	eposits (B3)			Roots (C3)     Yresence of Reduced Iron (C4)     X Saturation Visible on Aerial Ima     Stunted or Stressed Plants (D1								
	fat or Crust (B4)			Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2)								
	eposits (B5)			(C6)				utral Test (D5)				
	tion Visible on Ae	rial Imag	gery (B7)		ick Surfac	ce (C7)						
	ly Vegetated Con			Gauge o	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):						
Water Table F	Present?	Yes	No	Х	Depth (i		We	tland Hydrology Present?				
Saturation Pre		Yes	No	Х	Depth (i	nches):		Yes				
(includes capi												
Describe Rec	orded Data (strea	m gauge	e, monitoring wel	I, aerial p	photos, pr	evious in	spections), if available:					
Remarks:												
INCINAINS.												

Project/Site:	WETI Lake Ch			NATION DATA FORM - N City/County: Martin			t Region Sampling I	10/25/2022	
Applicant/Owner:		Lake Charlotte So			State:	MN	Sampling F		WB089B
Investigator(s):	;	Susan Mayer		Sec	tion, Townsh	nip, Range:		Sec.21 7	103N R30W
Landform (hillslope, terra	ace, etc.):	Hillslop	pe	Local	relief (conca	ave, convex	, none):		None
Slope (%): 4	Lat:	43.71294	-	Long:	-94.44	332	Datum:		WGS84
Soil Map Unit Name:	Crippin loa	m, 1 to 3 percent	slopes		NV	VI Classifica	ation:		NA
Are climatic/hydrologic c	conditions of t	ne site typical for	this time of	of the year?	Yes	(If no, expla	ain in remai	rks)	
Are vegetation X	, soil	, or hydrology		Significant	y disturbed?	? Are "	normal circ	umstance	s present? No
Are vegetation	, soil	, or hydrology		naturally p	roblematic?	(If ne	eded, expl	ain any a	nswers in remarks.)
SUMMARY OF FIN		_							
Hydrophytic Vegeta	ation Present?	? <u>No</u>							
Hydric Soil Present	t?	No		Is the s	sampled are	ea within a	wetland?		No
Wetland Hydrology	Present?	No		lf yes, o	optional wetl	and site ID:		WB089	
Remarks:									
Recently harvested a	agricultural fiel	ıd.							
VEGETATION U	se scientifie	c names of pla	ants.						
				Dominant	Indicator	Domir	nance Test	Workshe	et
Tree Stratum (	(Plot size:	)	% Cover	Species	Status		er of Domina e OBL, FAC		
2 3.							lumber of De s Across All		0 (B)
4						Percen	t of Domina	nt Species	· · ·
5				=Total Cov	or.	that are	OBL, FAC	W, or FAC	: <u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:	) -			CI	Preva	lence Inde	x Worksl	neet
1.	(	/					% Cover of		Multiply by:
2.						OBL s	pecies	x	1 =
3.						FACW	/ species		2 =
4.						FAC s	pecies		3 =
5.						FACU	species	x 4	4 =
		-		=Total Cov	ver	UPL s	pecies	x	5 =
Herb Stratum	(Plot size:	)					n totals	·	A)(B)
1						Preva	lence Index	x = B/A =	
2						ل ال	why tie Ve	nototion I	ndiaatara
3 4								-	ndicators: hytic vegetation
5							Dominance		
6							Prevalence		
7.									ations* (provide
8.							supporting	data in Re	emarks or on a
9.							separate sł	neet)	
10							Problemation	c hydroph	ytic vegetation*
				=Total Cov	rer		(explain)		
Woody Vine Stratum 1.	-	)					ors of hydric s unless distu		tland hydrology must be blematic
2				=Total Cov	rer	Veg	Irophytic Jetation sent?	No	
Remarks: (Include photo			e sheet)						

SOIL	
------	--

WB089B

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)				
Depth <u>Matrix</u>				dox Feat	ures							
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks				
0-14	10YR 2/1	100					Clay					
14-22	2.5Y 4/1	50					Clay					
14-22							Ciay					
	2.5Y 5/2	45						Mixed Matrix				
	7.5YR 5/6	5						Mixed Matrix				
31	Concentration, D	= Deple	tion, RM = Redu	ced Mat	rix, MS =	Masked		on: PL = Pore Lining, M = Matrix				
Hydric Soil			_					ematic Hydric Soils*:				
	stosol (A1)				ed Matrix	(S4)		dox (A16) (LRR K, L, R)				
	stic Epipedon (A2)			ndy Redo			Dark Surface (S7					
	ack Histic (A3)			pped Ma	. ,			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)							
	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)				problemade					
Restrictive La	ayer (if observed	):										
Type: Rock	k						Hydric Soil Presen	t? <u>No</u>				
Depth (inches	s): <u>22</u>											
Remarks:												
HYDROLO	GY											
Wetland Hyd	rology Indicators	5:										
Primary Indica	ators (minimum of	one is r	equired; check a	II that ap	<u>ply)</u>		Secondary Indica	ators (minimum of two required)				
Surface	e Water (A1)			Aquatic	Fauna (B	513)	Surface	Soil Cracks (B6)				
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)				
	tion (A3)				en Sulfide			Dry-Season Water Table (C2)				
	Marks (B1)				d Rhizosp							
Sedime	ent Deposits (B2)			Roots (0	C3)			Saturation Visible on Aerial Imagery (C9)				
Drift De	eposits (B3)			Presenc	or Stressed Plants (D1)							
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in <sup>-</sup>	Tilled Soils Geomor	Geomorphic Position (D2)				
	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)				
	tion Visible on Ae				ck Surfac	. ,						
	ly Vegetated Con		Irface (B8)		or Well Da							
Water-	Stained Leaves (E	39)		Other (E	xplain in	Remarks	S)					
Field Observ												
Surface Wate		Yes	No	X	Depth (ii		We	tland Hydrology				
Water Table F		Yes	No	X	Depth (ii			Present?				
Saturation Pre		Yes	No	Х	Depth (ii	ncnes):		No				
(includes capi		m aqua	monitoring wel	Laprialr	botos pr		Ispections), if available:					
Describe Reco	ordeu Dala (Sliedi	n yauye	s, monitoring wei	i, actial þ	notos, pr	evious III	ispections), il avallabie.					
Remarks:												







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

	WET	LAND DETER	RMINATI	ON DATA	FORM -	Midwes	st Regior	า		
Project/Site:	Lake Cł	narlotte	City/	County:	Marti	n	Sampling	Date:	10/25/2	2022
Applicant/Owner:		Lake Charlotte S	olar, LLC		State:	MN	Sampling	Point:	WB09	90A
Investigator(s):		Susan Mayer		Sectio	on, Townshi	p, Range:		Sec.21 T	103N R30	W
Landform (hillslope, terrace	e, etc.):	Depres	sion	Local r	elief (conca	ve, convex	, none):		Concave	
Slope (%): 3	Lat:	43.71331		Long:	-94.443	336	Datum:		WGS84	
Soil Map Unit Name:	Canisteo-C	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA	
Are climatic/hydrologic cor	ditions of t	he site typical for	this time c	f 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, exp	lain any ar	nswers in	remarks.)
SUMMARY OF FIND	INGS									
Hydrophytic Vegetation	on Present	? Yes								
Hydric Soil Present?		Yes		Is the sa	mpled area	a within a	wetland?		Yes	
Wetland Hydrology P	resent?	Yes		lf yes, op	tional wetla	nd site ID:	:	WB090		_
Remarks:										_
Recently tilled agricultura		•	0	al field.						
VEGETATION Use	scientifi	•		Devices	Le d'a stan	Dania		Manlark.		
Tree Stratum (Pl	ot cizo:	)	% Cover	Dominant	Indicator Status	Domin	hance lest	t Workshe	et	
1. (P)	ot size:	)	% Cover	Species	Status		er of Domina		0	(A)
2						that are	e OBL, FAC	W, or FAC:	0	(A)
3.							lumber of D s Across Al		0	(B)
4 5.								ant Species	%	(A/B)
·				=Total Cove	r	that are	e obl, i Ao	W, 011 AC.		_ (/ ( = )
Sapling/Shrub Stratum	(Plot size:	)				Preva	lence Inde	x Worksh	eet	
1.						Total	% Cover of	:	Multiply b	y:
2.						OBLs	species	x 1	=	
3						FACV	V species	x 2	=	
4							species		=	
5							species		=	
				=Total Cove	r	_	species	x 5	-	
Herb Stratum	(Plot size:	)					nn totals	(A	.)	(B)
1						Preva	lence Inde	x = B/A =		
2 3.						Hydro	onhytic Vo	getation Ir	dicatore	
3 4						-		for hydroph		
5						_	•	e test is >50	, ,	
6							Prevalence	e index is ≤	3.0*	
7.							Morpholog	ical adapta	tions* (pro	ovide
8.							supporting	data in Re	marks or o	on a
9							separate s	heet)		
10							Problemati	c hydrophy	tic vegeta	tion*
				=Total Cove	r	<u>_X</u>	(explain)			
1		)						soil and wetl rbed or prob		ogy must be
2				=Total Cove	r	Veç	drophytic getation sent?	Yes		
Remarks: (Include photo n Recently tilled agricultural			te sheet)			1				
WB090A

Profile Descr	iption: (Describe	e 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	
							-	
8-18	10YR 2/1	95	2.5Y 5/3	5	С	PL	Clay	Distinct or Prominent
*Type: C =	Concentration, D	- Dople	tion PM - Podu	cod Mat	iv MS -	Maskod	Sand Grains **Locatic	on: PL = Pore Lining, M = Matrix
<u>,</u>		- Deple	ellon, Rivi – Redu	ced Mati	IX, IVIS –	waskeu		0
Hydric Soil			0.			(0.4)	Indicators for Proble	•
	stosol (A1)				ed Matrix	(54)		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	. ,	Very Shallow Da	rk Surface (TF12)
Str	atified Layers (A5	5)	Loa	amy Gley	ed Matrix	: (F2)	Other (explain in	remarks)
2 c	m Muck (A10)		De	pleted Ma	atrix (F3)			
De	pleted Below Darl	k Surfac	e (A11) X Re	dox Dark	Surface	(F6)		
Thi	ick Dark Surface (	(A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hvdrop	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Re	dox Depr	essions (	F8)		esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Bootriotivo L	ayer (if observed	N.						
	ayer (il observed	1):					Undria Cail Dresson	
Type: Depth (inches	٨.				-		Hydric Soil Presen	t? Yes
Deptil (inches					-			
Remarks:								
HYDROLO	GY							
	rology Indicators	s:						
-	ators (minimum of		equired: check a	II that ap	(vla		Secondary Indica	tors (minimum of two required)
	e Water (A1)				Fauna (B	(13)		Soil Cracks (B6)
								( )
	/ater Table (A2)				uatic Plar	. ,		e Patterns (B10)
	tion (A3)				en Sulfide			son Water Table (C2)
	Marks (B1)				d Rhizosp	oneres or	· _ /	Burrows (C8)
	ent Deposits (B2)			Roots (C	co) ce of Redu	upod Iron		on Visible on Aerial Imagery (C9)
	eposits (B3) /at or Crust (B4)							or Stressed Plants (D1) ohic Position (D2)
	eposits (B5)		Х	(C6)	IIOII Reut			utral Test (D5)
		rial Ima			ick Surfac	no (C7)		
	tion Visible on Ae					` '		
·					or Well Da			
vvaler-	Stained Leaves (E	59)		Other (E	xplain in	Remarks	5)	
Field Observa					_			
Surface Water		Yes	No	<u>X</u>	Depth (ii		We	tland Hydrology
Water Table F		Yes	No	X	Depth (ii			Present?
Saturation Pre		Yes	No	Х	Depth (ii	nches):		Yes
(includes capi			., .					
Describe Reco	orded Data (strea	m gauge	e, monitoring wel	i, aerial p	onotos, pr	evious in	spections), if available:	
Remarks:								

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	st Regior	า	
Project/Site:	Lake Ch	narlotte	City/	County:	Marti	n	Sampling	Date:	10/25/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling I	Point:	WB090B
Investigator(s):		Susan Mayer		Secti	on, Townshi	p, Range:		Sec.21 T	103N R30W
Landform (hillslope, terra	ce, etc.):	Hillslo	ре	Local	elief (conca	ve, convex	, none):		Convex
Slope (%): 4	Lat:	43.71294		Long:	-94.443	331	Datum:		WGS84
Soil Map Unit Name:	Crippin loa	am, 1 to 3 percent	slopes		NW	I Classific	ation:		NA
Are climatic/hydrologic co	onditions of t	he site typical for	this time o	of the year?	Yes (	If no, expla	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, expl	lain any ai	nswers in remarks.)
SUMMARY OF FIN	DINGS								
Hydrophytic Vegetat	tion Present	? No							
Hydric Soil Present?	?	No		Is the s	ampled area	a within a	wetland?		No
Wetland Hydrology	Present?	No		lf yes, o	otional wetla	nd site ID:	:	WB090	
Remarks:									
Recently harvested ac									
VEGETATION Us	e scientifi			Devices	L. P. den	Dania	<del>-</del>	M/	- 4
Tree Stratum (F	Plot size:			Dominant Species	Indicator Status	Numbe	er of Domina e OBL, FAC	ant Species	
2 3						Total N	lumber of D s Across All	ominant	0 (B)
4 5				Tatal Que			nt of Domina e OBL, FAC		<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:	、 <del>-</del>		=Total Cove		Brove	lence Inde	w Workoh	oot
<u>Sapiing/Shiub Stiatum</u> 1.	(Plot size:	)					% Cover of		Multiply by:
າ 							species		=
3.							V species	x 2	
4.							species		=
5.							species		=
				=Total Cove	er	UPL s	species	x 5	=
Herb Stratum 1 2.	(Plot size:	)					nn totals	(A x = B/A =	.)(B)
3 4.							phytic Ve Rapid test	-	ndicators: nytic vegetation
5.							Dominance	e test is >5	0%
6.							Prevalence	e index is ≤	3.0*
7									tions* (provide
8									marks or on a
9							separate sl		
10								c hydrophy	tic vegetation*
				=Total Cove	er		(explain)		
		)					ors of hydric s unless distu		and hydrology must be lematic
2				=Total Cove	Pr	Veg	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo Harvested agricultural fiel			te sheet)						

WB090B

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
0-10	10YR 2/1	100					Clay	
							-	
10-22	2.5Y 4/1	50					Clay	
	2.5Y 5/2	45						Mixed Matrix
	7.5YR 5/6	5						Mixed Matrix
		-						
+= 0								
,,	Concentration, D	= Deple	tion, RM = Redu	ced Matr	rix, MS =	Masked		on: 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)		Sa	ndy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)
Bla	ack Histic (A3)		Stri	pped Ma	trix (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)
	atified Layers (A5	,		•	ed Matrix	. ,	Other (explain in	
	m Muck (A10)	,			atrix (F3)	( )	、	,
	pleted Below Darl	k Surfac			Surface	(F6)		
	ick Dark Surface (		· · · —		ark Surfac	. ,		
							, j i	nytic vegetation and wetland
	ndy Mucky Minera			dox Depr	essions (	F8)	problematic	esent, unless disturbed or
50	m Mucky Peat or	Peat (S	3)			-	P	
Restrictive L	ayer (if observed	l):						
Type: Rock	k						Hydric Soil Presen	t? No
Depth (inches	s): 22							
Description								
Remarks:								
	<u></u>							
HYDROLO								
-	rology Indicators							
	ators (minimum of	one is r	equired; check a	II that ap	<u>ply)</u>		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)
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (C	C3)		Saturatio	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 Imad	uerv (B7)		ck Surfac	e (C7)		
	ly Vegetated Con				or Well Da			
	Stained Leaves (E			-	Explain in	. ,	2)	
	```					· comance	-,	
Field Observ		Maa	N	V	Denth (			
Surface Wate		Yes	No	X 	Depth (ii		We	tland Hydrology
Water Table F		Yes	No No	X 	Depth (ii			Present?
Saturation Pre		Yes	No	Х	Depth (ii	icnes):		No
(includes capi			monitoria		hotos		on option of the state of the	
Describe Rec	orded Data (stream	m gauge	e, monitoring wel	i, aerial p	motos, pr	evious in	spections), if available:	
Demert								
Remarks:								







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

	WE	TLAND DETE	RMINAT	ION DATA	FORM -	Midwest	t Region	
Project/Site:	Lake C	Charlotte	City	/County:	Martir	n	Sampling Date:	10/25/2022
Applicant/Owner:		Lake Charlotte S	olar, LLC		State:	MN	Sampling Point	WB092A
Investigator(s):		Susan Mayer		Sectio	on, Township	p, Range:	Sec	.16 T103N R30W
Landform (hillslope, ter	rrace, etc.):	Broad Dep	pression	Local r	elief (concav	ve, convex,	none):	Concave
Slope (%): 1	Lat:	43.7261		Long:	-94.438	82	Datum:	WGS84
Soil Map Unit Name:	Canisteo	-Glencoe complex	, 0 to 2 pei	rcent slopes	NW	I Classifica	ition:	NA
Are climatic/hydrologic	conditions of	the site typical for	this time	of the year?	Yes (	lf no, expla	in in remarks)	
Are vegetation	X , soil	, or hydrology		Significantly	disturbed?	Are "n	ormal circumst	ances present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If nee	eded, explain a	any answers in remarks.)
SUMMARY OF FI	NDINGS							
Hydrophytic Vege	etation Preser	nt? Yes						
Hydric Soil Prese	nt?	Yes		Is the sa	mpled area	a within a v	wetland?	Yes
Wetland Hydrolog	gy Present?	Yes		lf yes, op	tional wetla	nd site ID:	WB	092
Remarks:								
VEGETATION U	Jse scienti	fic names of p	ants.					
		· · ·		Dominant	Indicator	Domin	ance Test Wor	ksheet
Tree Stratum	(Plot size:	30)	% Cover	Species	Status	Nisseka		!
1							r of Dominant Sp OBL, FACW, or	
2.						Total N	umber of Domina	ant
3							Across All Strat	
4						Percent	of Dominant Sp	ecies
5				Tatal Caus	-	that are	OBL, FACW, or	FAC: <u>0%</u> (A/B)
Sapling/Shrub Stratur	n (Plot size	:: 15 )		_=Total Cove	ſ	Proval	ence Index Wo	vrkshoot
1.	<u>II</u> (I IOT 3126	. 15 )					6 Cover of:	Multiply by:
2.						OBL s		x 1 = 0
3.							species 0	x 2 = 0
4.							pecies 0	x 3 = 0
5.						FACU	species 0	x 4 = 0
				=Total Cove	r	UPL sp	pecies 40	x 5 =200
Herb Stratum	(Plot size	: 5)				Colum	n totals 40	(A) 200 (B)
1. Zea mays			40	Y	UPL	Preval	ence Index = B	/A =5
2								
3								ion Indicators:
4								drophytic vegetation
5 6.							Dominance test Prevalence inde	
7								daptations* (provide
8.								in Remarks or on a
9.							separate sheet)	
10.						F	Problematic hyd	rophytic vegetation*
			40	=Total Cove	r	<u> </u>	explain)	
Woody Vine Stratum 1.	(Plot size	: 15 )					rs of hydric soil ar unless disturbed o	nd wetland hydrology must be or problematic
2				=Total Cove	r	Veg	rophytic etation sent?	,
Demostres (Instants of	to pumb !		to ab = - 1)			1168		<u>Yes</u>
Remarks: (Include pho	to numbers h	ere or on a separa	ate sheet)					
Agricultural field. Corn	appears stun	ited. Bare ground:	60%					

WB092A

Profile Descr	iption: (Describe	e 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					Clay	
							,	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced 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)		Sai	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)	)	Sai	ndy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)
	ack Histic (A3)			-	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)		•••	ky Minera	al (F1)		rk Surface (TF12)
	atified Layers (A5	,		•	ed Matrix	· · /	X Other (explain in	, ,
	m Muck (A10)	,			atrix (F3)	( )		,
	pleted Below Darl	k Surfac			Surface	(F6)		
	ick Dark Surface (		· · _		ark Surfac	· · /	*ludiostono of buduou	
	ndy Mucky Minera				ressions (			nytic vegetation and wetland esent, unless disturbed or
	m Mucky Peat or				00010110 (	10)	problematic	
	-		0)					
	ayer (if observed	i):						
Type:	、 、				-		Hydric Soil Preser	t? Yes
Depth (inches	.):				-			
Remarks:								
A12 Assumed	d							
HYDROLO	GY							
Wetland Hyd	rology Indicators	s:						
Primary Indica	ators (minimum of	one is r	equired; check a	II that ap	<u>ply)</u>		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	513)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)
Saturat	tion (A3)				en Sulfide			son Water Table (C2)
Water	Marks (B1)			Oxidize	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presenc	e of Redu	uced Iron	n (C4) X Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in <sup>-</sup>	Tilled Soils X Geomor	phic Position (D2)
	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)		ick Surfac			
Sparse	ly Vegetated Con	cave Su	Irface (B8)	Gauge of	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	5)	
Field Observ	ations:	-				-		
Surface Wate		Yes	No	Х	Depth (ii			tland Hydrology
Water Table F		Yes	No	Х	Depth (ii		VVE	Present?
Saturation Pre		Yes	No	Х	Depth (ii	nches):		Yes
(includes capi			.,					
Describe Rec	orded Data (strea	m gauge	e, monitoring wel	i, aerial p	onotos, pr	evious in	spections), if available:	
Pomorke								
Remarks:								

	WET	FLAND DET	ERMINAT	ION DATA	FORM -	Midwest	Region	
Project/Site:	Lake C	Charlotte	City	/County:	Martir	n ;	Sampling Date:	10/25/2022
Applicant/Owner:		Lake Charlotte	e Solar, LLC		State:	MN	Sampling Point:	WB092B
Investigator(s):		Susan Mayer		Secti	on, Township	p, Range:	Sec.16	T103N R30W
Landform (hillslope, terra	ace, etc.):	Hil	Islope	Local r	elief (concav	ve, convex,	none):	Convex
Slope (%): 3	Lat:	43.726	32	Long:	-94.438	319	Datum:	WGS84
Soil Map Unit Name:		Glencoe comp	-	-		'I Classifica		NA
Are climatic/hydrologic c		the site typical	for this time	of the year?	Yes (	lf no, explai	in in remarks)	
Are vegetation X	, soil	, or hydrolo	ду	Significantly			ormal circumstanc	·
Are vegetation SUMMARY OF FIN	, soil IDINGS	, or hydrolo	gy	_naturally pro	oblematic?	(If nee	ded, explain any	answers in remarks.)
Hydrophytic Vegeta	ation Presen	nt? No	)					
Hydric Soil Present	t?	No	)	Is the sa	ampled area	a within a v	vetland?	No
Wetland Hydrology	/ Present?	No	)	lf yes, o	ptional wetla	nd site ID:	WB092	
Remarks:								
VEGETATION U	se scienti	ic names of	plants.					
			Absolute	Dominant	Indicator	Domina	ance Test Worksh	ieet
Tree Stratum (	(Plot size:	30 )	% Cover	- Species	Status		of Dominant Specie OBL, FACW, or FA	
2 3							umber of Dominant Across All Strata:	1(B)
4 5							of Dominant Specie OBL, FACW, or FA	
				_=Total Cove	er			-
Sapling/Shrub Stratum	(Plot size	: 15	)				ence Index Works	
1 2.						OBL sp	6 Cover of: pecies 0 x	Multiply by: 1 = 0
3.								2 = 0
4.						FAC sp		3 = 0
5.								4 = 0
-				=Total Cove	er	UPL sp	'	5 = 200
Herb Stratum	(Plot size	: 5	)	_		Colum	n totals 40	(A) 200 (B)
1. <i>Zea mays</i> 2.			40	Y	UPL	Prevale	ence Index = B/A =	5
3.						Hydro	phytic Vegetation	Indicators:
4.							Rapid test for hydro	phytic vegetation
5.						C	Dominance test is >	•50%
6						F	Prevalence index is	≤3.0*
7							Aorphological adap	
8							supporting data in F	temarks or on a
9							separate sheet)	butio vogototion*
10			40	Total Cours			Problematic hydrop	nytic vegetation"
Woody Vine Stratum 1.	(Plot size	·	)	=Total Cove	÷r	*Indicator	explain) rs of hydric soil and w unless disturbed or pr	etland hydrology must be oblematic
2				_=Total Cove	er	Vege	rophytic etation sent? <u>No</u>	_
Remarks: (Include photo		ere or on a sep	arate sheet)					

WB092B

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
0-14	10YR 2/1	100			51		Clay Loam	
14-20	10YR 2/1	50					Sandy Clay	
	2.5Y 5/3	50						Mixed Matrix
		-						
*Type: C =	Concentration, D	– Donic	tion RM - Redu	ced Mat	riv MS -	Masked 9	Sand Grains **Locatio	on: PL = Pore Lining, M = Matrix
Hydric Soil		- Depie			IX, IVIO =	waskeu v	Indicators for Proble	0.
-	stosol (A1)		Sa	adv Glov	ed Matrix	(\$4)		dox (A16) (LRR K, L, R)
						(34)		
	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	< Surfac	e (A11) Re	dox Dark	Surface	(F6)		
Thi	ick Dark Surface (	A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Re	dox Depr	essions (	F8)		esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive La	ayer (if observed	):						
Type:		/-					Hydric Soil Presen	t? No
Depth (inches	.):				-			<u> </u>
Remarks:								
HYDROLO	GY							
Wetland Hyd	rology Indicators	5:						
Primary Indica	ators (minimum of	one is r	equired; check a	II that ap	ply)		Secondary Indica	tors (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	513)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Aq	uatic Plai	nts (B14)	Drainage	e Patterns (B10)
Saturat	tion (A3)			Hydroge	en Sulfide	Odor (C		son Water Table (C2)
Water	Marks (B1)				d Rhizosp			Burrows (C8)
	ent Deposits (B2)			Roots (0				on Visible on Aerial Imagery (C9)
	eposits (B3)				e of Red	uced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in T	Tilled Soils Geomor	phic Position (D2)
Iron De	eposits (B5)			(C6)			FAC-Net	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 of	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	5)	
Field Observ	ations:							
Surface Wate		Yes	No	х	Depth (i	nches):		
Water Table F		Yes	No	X	Depth (i		We	tland Hydrology
Saturation Pre		Yes	No	Х	Depth (i			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:	
	-	-	-		-			
Remarks:								
1								







			TERM					-		40/05/0000
Project/Site: Applicant/Owner:	Lake C	harlotte Lake Charlo	otto Sola		County:	Marti State:	MN	Sampling I Sampling I		10/25/2022 WB095A
Investigator(s):		Susan May		II, LLO	Section	on, Townshi				103N R30W
Landform (hillslope, terra	ce etc.):		epressic	 n		elief (conca		-	Sec. 10 1	Concave
Slope (%): 0	Lat:	-	2445	Л	Long:	-94.438	-	Datum:		WGS84
Soil Map Unit Name:		Glencoe con		to 2 per	· · · _		I Classific	-		NA
Are climatic/hydrologic co								ain in rema	rks)	
		, or hydro			Significantly	· `		normal circ	,	present? No
Are vegetation	, soil	, or hydro	•••		naturally pro					nswers in remarks.)
SUMMARY OF FIN		, or riyers	51095				(11.116			
Hydrophytic Vegeta	tion Presen	t? `	Yes							
Hydric Soil Present?	?	`	Yes		Is the sa	ampled area	a within a	wetland?		Yes
Wetland Hydrology	Present?	_	Yes		lf yes, o	ptional wetla	nd site ID:	:	WB095	
			ofalar							
VEGETATION Us	e scientif	ic names			Dominant	Indicator	Domi	nance Test	Worksho	ot
Tree Stratum (F	Plot size:	30 )			Species	Status	Numbe	er of Domina	Int Species	
2							Total N	e OBL, FAC	ominant	(A) (B)
4.								es Across All		<u> </u>
5.								nt of Domina e OBL, FAC		33% (A/B)
					=Total Cove	er				
Sapling/Shrub Stratum	(Plot size:	15	)					alence Inde		
1								% Cover of		Multiply by:
2 3								species V species	0 x 1 10 x 2	
3 4								species _	<u>10</u> x 2 0 x 3	
5.								J species _	20 x 4	
					=Total Cove	er		species	20 x 5	
Herb Stratum	(Plot size:	5	)		•			nn totals	50 (A	.) 200 (B)
1. Zea mays			<u> </u>	20	Y	UPL	Preva	lence Inde	c = B/A =	4
2. Setaria faberi				20	Y	FACU			-	
3. Echinochloa crus-ga	alli			10	Y	FACW	Hydro	ophytic Ve	getation Ir	ndicators:
4										nytic vegetation
5								Dominance		
6								Prevalence		
7 8										tions* (provide marks or on a
9								separate sl		
10.										rtic vegetation*
				50	=Total Cove	er		(explain)	, , ,	5
Woody Vine Stratum 1.	(Plot size:		)				*Indicate	,		and hydrology must be lematic
2					=Total Cove	er	Veç	drophytic getation esent?	Yes	
Remarks: (Include photo Agricultural field. Bare gro		ere or on a s	eparate	sheet)						

WB095A

Profile Descr	iption: (Describe	e 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					Clay	
*Type: C =	Concentration, D	= Deple	tion. RM = Redu	ced Mati	rix. MS =	Masked	Sand Grains. **Locatio	on: PL = Pore Lining, M = Matrix
Hydric Soil		2 opie		oou maa				ematic Hydric Soils*:
-	stosol (A1)		Sar	ndv Glev	ed Matrix	(S4)		dox (A16) (LRR K, L, R)
	stic Epipedon (A2)			ndy Redo		(01)	Dark Surface (S	
	ack Histic (A3)	,		•	atrix (S6)			Masses (F12) (LRR K, L, R)
	( )	4)		••	` '			
·	drogen Sulfide (A	,		•	ky Minera	. ,	*	rk Surface (TF12)
	atified Layers (A5	)			ed Matrix	(Г2)	X Other (explain in	Temarks)
	m Muck (A10)				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	l):						
Туре:					_		Hydric Soil Preser	t? Yes
Depth (inches	s):				-			
Domorko								
Remarks:								
A12 Assume	d							
ATZ ASSume	u							
HYDROLO	GY							
	rology Indicators							
-	ators (minimum of		equired: check a	ll that an	nlv)		Secondary Indica	ators (minimum of two required)
-		0110 13 1	equired, cricek a			12)		
	e Water (A1)				Fauna (B			Soil Cracks (B6)
	/ater Table (A2)				uatic Plar	· · ·		e Patterns (B10)
	tion (A3)				en Sulfide		· · · ·	son Water Table (C2)
	Marks (B1)				d Rhizosp	neres or		Burrows (C8)
	ent Deposits (B2)			Roots (C		upod Iron		on Visible on Aerial Imagery (C9)
	eposits (B3) /at or Crust (B4)				e of Redu		. ,	or Stressed Plants (D1) ohic Position (D2)
	eposits (B5)			(C6)	IIOII Reut			utral Test (D5)
	tion Visible on Ae	rial Imag	non/ (B7)		ick Surfac	$\sim (C7)$		
					ick Surfac or Well Da	. ,		
	ely Vegetated Con Stained Leaves (E			-			.)	
	`	<i>(</i> ec			xplain in	Remarks	>/	
Field Observ		.,			_			
Surface Wate		Yes	No	X	Depth (ii		We	tland Hydrology
Water Table F		Yes	No	X	Depth (ii			Present?
Saturation Pre		Yes	No	Х	Depth (ii	ncnes):		Yes
(includes capi		manua	monitoring		hotos		enactions) if available	
Describe Reco	ordeu Data (streat	m yauge	, monitoring wei	i, aeriai p	notos, pr	evious In	spections), if available:	
Remarks:								
Romaina.								

	WET		TERMINA	TION DAT	A FORM -	Midwes	t Region	
Project/Site:	Lake C	Charlotte	Ci	ty/County:	Martin	n	Sampling Date:	10/25/2022
Applicant/Owner:		Lake Charlo	tte Solar, LLC	2	State:	MN	Sampling Point:	WB095B
Investigator(s):		Susan Maye	r	Sect	ion, Townshi	p, Range:	Sec.1	6 T103N R30W
Landform (hillslope, terra	ace, etc.):	н	lillslope	Local	relief (concav	ve, convex	, none):	None
Slope (%): 3	Lat:	43.72	454	Long:	-94.438	314	Datum:	WGS84
Soil Map Unit Name:				ercent slopes		I Classifica		NA
Are climatic/hydrologic c		the site typica	al for this time	e of the year?	Yes (	lf no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydro	logy	Significant	y disturbed?	Are "r	normal circumstar	nces present? No
Are vegetation SUMMARY OF FIN	, soil	, or hydro	logy	naturally pr	oblematic?	(If ne	eded, explain an	y answers in remarks.)
Hydrophytic Vegeta	ation Presen	it? N	10					
Hydric Soil Present	:?	١	10	Is the s	ampled area	a within a	wetland?	No
Wetland Hydrology	Present?	١	10	lf yes, c	ptional wetla	nd site ID:	WB09	)5
Remarks:								
VEGETATION Us	se scientif	ic names c	of plants.					
			Absolut	e Dominant	Indicator	Domin	nance Test Works	sheet
Tree Stratum (	(Plot size:	30 )	% Cove	er Species	Status		er of Dominant Spece OBL, FACW, or F	
2 3							lumber of Dominan s Across All Strata:	
4 5							t of Dominant Spece OBL, FACW, or F	
				=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:	: 15	_ )				lence Index Worl	
1 2.							% Cover of: pecies 0	Multiply by: x 1 = 0
3.							/ species 0	x = 0 x = 0
4.							pecies 0	$x^{2} = 0$ $x^{3} = 0$
5.							species 0	x = 0
				=Total Cov	er		•	x 5 = 250
Herb Stratum	(Plot size:	: 5	)			Colum	n totals 50	(A) 250 (B)
1. <i>Zea mays</i> 2.			50	Y	UPL	Preval	lence Index = B/A	= 5
3.						Hydro	phytic Vegetatio	n Indicators:
4.						ı	Rapid test for hyd	rophytic vegetation
5.						ı	Dominance test is	>50%
6						I	Prevalence index	is ≤3.0*
7								aptations* (provide
8							supporting data in	Remarks or on a
							separate sheet)	
10			50	Tatal Cau			-	ophytic vegetation*
Woody Vine Stratum 1.	(Plot size:		50	=Total Cov	ei	*Indicato	(explain) ors of hydric soil and unless disturbed or <sub>l</sub>	wetland hydrology must be problematic
2				=Total Cov	er	Veg	Irophytic letation sent? <u>No</u>	0
Remarks: (Include photo Agricultural field. Bare gr		ere or on a se	parate sheet	)				

WB095B

Profile Descr	iption: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		R	edox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-19	10YR 2/1	100	. ,				Clay Loam	
							-	
19-25	2.5Y 5/3	100		-			Clay Loam	
				+				
				-				
*Type: C =	Concentration, D	= Deple	tion. RM = Red	uced Mat	rix. MS =	Masked S	Sand Grains. **Locatio	on: PL = Pore Lining, M = Matrix
Hydric Soil		Dopie						ematic Hydric Soils*:
-	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)		dox (A16) (LRR K, L, R)
	stic Epipedon (A2)			indy Redo		(01)	Dark Surface (S	
	ack Histic (A3)			ripped Ma				Masses (F12) (LRR K, L, R)
	drogen Sulfide (A3)	4)		amy Muc	• •			rk Surface (TF12)
	•	,		amy Gley		` '		
	atified Layers (A5 m Muck (A10)	)				(Г2)	Other (explain in	Ternarks)
	( )	0		epleted M	. ,			
	pleted Below Darl		· · · —	dox Dark		. ,		
	ick Dark Surface (	,		epleted Da				nytic vegetation and wetland
	ndy Mucky Minera			edox Depi	essions (	F8)	hydrology must be pr problematic	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematio	
Restrictive La	ayer (if observed	):						
Туре:					_		Hydric Soil Presen	t? No
Depth (inches	):				_			
Remarks:								
Remarks.								
HYDROLO	GY							
	rology Indicators							
-	ators (minimum of		equired: check	all that an	nlv)		Secondary Indica	ators (minimum of two required)
-	e Water (A1)				Fauna (B	12)		Soil Cracks (B6)
				-				
Ŭ	(A2)			- '	uatic Plai	` '	*	e Patterns (B10)
	tion (A3)				en Sulfide			son Water Table (C2)
	Marks (B1)				d Rhizosp	neres on	· _ /	Burrows (C8)
	ent Deposits (B2)			Roots (	co) ce of Red	upod Iron		on Visible on Aerial Imagery (C9)
	eposits (B3) lat or Crust (B4)		. <u> </u>	-			· · ·	or Stressed Plants (D1) ohic Position (D2)
	eposits (B5)			(C6)	non Keut			utral Test (D5)
	tion Visible on Ae	rial Ima	nerv (B7)		ick Surfac	(C7)		
	ly Vegetated Con			-	or Well Da			
·	Stained Leaves (E			-	Explain in		:)	
		,					<i>יו</i>	
Field Observa		V	K I .	v	Denth /	a a b a a '		
Surface Water Water Table F		Yes	No	$\frac{x}{x}$	Depth (i	· _	We	tland Hydrology
Saturation Pre		Yes Yes	No No	<u> </u>	Depth (in Depth (in			Present? No
(includes capi		165			Depti (I			
· · ·		m ຕອບດ		l aerial r	hotos pr	evious in	spections), if available:	
		yauyt	, morntoring we	n, aonai p				
Remarks:								







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

Project/Site:		LAND DE	IERMIN		County:	A FORM Mar		Sampling D	ate:	10/25/2022
Applicant/Owner:		Lake Charlo	tte Solar,			State:	MN	Sampling P		WB096A
Investigator(s):		Susan Maye	er		Sect	ion, Townsł	nip, Range:		Sec.16 T10	)3N R30W
Landform (hillslope, te	rrace, etc.):	,	pression			relief (conc			C	Concave
Slope (%): 2	. ,	43.72			Long:	-94.43		Datum:		NGS84
Soil Map Unit Name:		Glencoe com		2 per	· · · -		NI Classific	· _		NA
Are climatic/hydrologic				-				ain in remark		
		, or hydro			Significantl	-		'normal circu	,	present? No
Are vegetation	, soil	, or hydro			naturally pr					wers in remar
		, or myaro				obiernatio	(1110		any and	
Hydrophytic Vege	etation Presen	t? Y	'es							
Hydric Soil Prese	ent?	Y	′es		Is the s	ampled are	ea within a	wetland?	Y	<b>′es</b>
Wetland Hydrolog	gy Present?	Y	'es		lf yes, c	ptional wet	land site ID	:	WB096	
Remarks:										
Recently harvested	l agricultural fi	eld.								
VEGETATION	Use scientif	ic names c	of plants							
			Abso	olute	Dominant	Indicator	Domi	nance Test \	Norksheet	
<u>Tree Stratum</u> 1.	(Plot size:	30 )	% C	over	Species	Status		er of Dominan e OBL, FACW		0 (A)
3								Number of Do		2 (B)
4							Percer	nt of Dominan	t Species	0% (A/B)
0					=Total Cov	er	linal ar	e OBL, FACW	, of FAC.	(/////////////////////////////////
Sapling/Shrub Stratu	m (Plot size:	15	)				Preva	alence Index	Workshee	et
1.	<u> </u>		_ /					% Cover of:		lultiply by:
2.							OBL	species	0 x 1 =	: 0
3.							FACV	V species	0 x 2 =	• 0
4.							FAC	species	0 x 3 =	. 0
5.							FACL	J species	30 x 4 =	120
					=Total Cov	er	UPL	species	40 x 5 =	200
Herb Stratum	(Plot size:	5	)				Colur	nn totals	70 (A)	320 (B
1. Zea mays			4	0	Y	UPL	Preva	alence Index	= B/A =	4.57
2. Setaria faberi			3	0	Y	FACU				
3							Hydro	ophytic Veg		
										tic vegetation
-								Dominance		
6								Prevalence i		
7										ons* (provide
8 9.								supporting d separate she		aiks ui Uli a
10										c vegetation*
10			7	0	=Total Cov	or		(explain)	nyuropnyu	c vegetation
Woody Vine Stratum	(Plot size:	15	)	0			*Indicate	ors of hydric so		nd hydrology mus
1 2.							-	, unless disturb		mallu
					=Total Cov	er	Ve	getation esent?	Yes	
Remarks: (Include pho Harvested agricultural			eparate sh	eet)					<u>res</u>	

WB096A

Profile Descr	iption: (Describe	to the	depth needed to	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 Loam	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced 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)		Sai	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 (S7	7) (LRR K, L)
Bla	ack Histic (A3)		Stri	pped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hv	drogen Sulfide (A	4)		• •	ky Minera	d (F1)		rk Surface (TF12)
	atified Layers (A5	,		•	ed Matrix	. ,	X Other (explain in	. ,
	m Muck (A10)	,			atrix (F3)	( )		
De	pleted Below Darl	< Surfac			Surface	(F6)		
	ick Dark Surface (		· · · —	oleted Da	ark Surfac	xe (F7)	*Indicators of hydroph	nytic vegetation and wetland
	ndy Mucky Minera	· ·			ressions (		, , ,	esent, unless disturbed or
	m Mucky Peat or					. 0)	problematic	
						[		
	ayer (if observed	):						
Type:	、 、				-		Hydric Soil Presen	t? Yes
Depth (inches					-			
Remarks:								
A12 Assume	d							
HYDROLO	GY							
Wetland Hyd	rology Indicators	5:						
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)
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
	eposits (B3)				e of Redu			or Stressed Plants (D1)
	lat or Crust (B4)				Iron Redu	iction in T		ohic Position (D2)
	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)
	tion Visible on Ae		· · · · ·		ick Surfac	. ,		
·	ly Vegetated Con		Irface (B8)	-	or Well Da			
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	s)	
Field Observ	ations:							
Surface Wate		Yes	No	X	Depth (ii	· _	We	tland Hydrology
Water Table F		Yes	No	X	Depth (ii			Present?
Saturation Pre		Yes	No	Х	Depth (ii	nches):		Yes
(includes capi		m co	monitoria		hotos -	ovious :-	opportions) if available	
Describe Kec	ordeu Data (streal	m gauge	, monitoring wel	i, aeriai p	motos, pr	evious in	spections), if available:	
Remarks:								
. tomanto.								

	WET	LAND DETE	ERMINAT	ION DATA	FORM -	Midwes	st Region	
Project/Site:	Lake Cl	harlotte	City	/County:	Martir	1	Sampling Date:	10/25/2022
Applicant/Owner:		Lake Charlotte	Solar, LLC		State:	MN	Sampling Point:	WB096B
Investigator(s):		Susan Mayer		Section	on, Township	o, Range:	Sec.16	T103N R30W
Landform (hillslope, terr	race, etc.):	Hills	slope	Local r	elief (concav	e, convex	<, none):	None
Slope (%): 1	Lat:	43.7245	51	Long:	-94.438	96	Datum:	WGS84
Soil Map Unit Name:		Glencoe comple				l Classific		NA
Are climatic/hydrologic		the site typical f	or this time	of the year?	Yes (I	<i>i</i> 1	ain in remarks)	
Are vegetation X	<, soil	, or hydrolog	JY	Significantly	disturbed?	Are "	'normal circumstance	es present? No
Are vegetation	, soil	, or hydrolog	JY	naturally pro	oblematic?	(If ne	eded, explain any a	answers in remarks.)
SUMMARY OF FI	NDINGS							
Hydrophytic Veget	tation Present	t? No						
Hydric Soil Preser	nt?	Yes		Is the sa	ampled area	within a	wetland?	No
Wetland Hydrolog	y Present?	No		lf yes, o	ptional wetla	nd site ID:	:WB096	
Remarks:								
VEGETATION L	Jse scientifi	ic names of	plants.					
				Dominant	Indicator	Domir	nance Test Worksh	eet
Tree Stratum 1.	(Plot size:	30 )	% Cover	Species	Status		er of Dominant Specie e OBL, FACW, or FAC	
2 3							Number of Dominant as Across All Strata:	(B)
4 5							nt of Dominant Specie e OBL, FACW, or FAC	
				=Total Cove	er			
Sapling/Shrub Stratum	n (Plot size:	15 )	)			Preva	alence Index Works	heet
1							% Cover of:	Multiply by:
2							·	1 =
3 4							•	2 = 0 3 = 0
4 5							•	3 = 0 4 = 0
J				=Total Cove	er		•	5 = 250
Herb Stratum	(Plot size:	5)		-	-		•	(A) 250 (B)
1. Zea mays	,	,	50	Y	UPL	Preva	alence Index = $B/A$ =	
2.								
3.						Hydro	ophytic Vegetation	Indicators:
4.							Rapid test for hydro	phytic vegetation
5							Dominance test is >	
							Prevalence index is	
							Morphological adapt	
8							supporting data in R	emarks or on a
9 10.							separate sheet) Problematic hydroph	avtic vocatation*
10			50	=Total Cove	ar.		(explain)	
Woody Vine Stratum	(Plot size:	′	)		51	*Indicato	,	etland hydrology must be oblematic
1 2				_=Total Cove	er	Hyo Veg	drophytic getation esent? <u>No</u>	
Remarks: (Include phot Agricultural field. Bare (		re or on a sepa	arate sheet)					

WB096B

Profile Descr	iption: (Describe	to the	depth neede	d to	docum	ent the i	ndicator	or confirm the absence	of indicators.)	
Depth <u>Matrix</u>				Red	lox Feat	ures				
(Inches)	Color (moist)	%	Color (mois	t)	%	Type*	Loc**	Texture	Remarks	
0-38	10YR 2/1	100		.,		51		Clay		
								-		
38-40	10YR 2/1	90	2.5Y 5/3		10	С	PL/M	Clay	Distinct or Prominent	
		1								
*Type: C =	Concentration, D	= Deple	tion, RM = Re	educ	ced Matr	ix, MS =	Masked S	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix	
Hydric Soil			,			,		Indicators for Proble	0.	
-	stosol (A1)			Sano	dv Gleve	ed Matrix	(S4)		dox (A16) (LRR K, L, R)	
	stic Epipedon (A2)				dy Redo		(- )	Dark Surface (S7		
	ack Histic (A3)				-	trix (S6)			Masses (F12) (LRR K, L, R)	
	drogen Sulfide (A	4)				ky Minera	l (F1)		rk Surface (TF12)	
,	atified Layers (A5	,			•	ed Matrix	. ,	X Other (explain in		
	m Muck (A10)	/				atrix (F3)	(1 _)		romano)	
	pleted Below Dark	k Surfac		•		Surface	(F6)			
	ick Dark Surface (		· · · —			ark Surfac	. ,			
	ndy Mucky Minera	. ,				essions (			nytic vegetation and wetland esent, unless disturbed or	
	mucky Mucky Minera			Reu	ox Depi	65510115 (	го)	problematic		
	-	-	3)					•		
	ayer (if observed	l):								
Туре:								Hydric Soil Presen	t? Yes	
Depth (inches	):									
Remarks:										
A12 Assumed	d									
HYDROLO	GY									
Wetland Hyd	rology Indicators	s:								
Primary Indica	ators (minimum of	one is r	equired; chec	k all	that ap	ply)		Secondary Indica	tors (minimum of two required)	
Surface	e Water (A1)			1	Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)	
	/ater Table (A2)		_			uatic Plar			Patterns (B10)	
0	tion (A3)		_	Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C						
	Marks (B1)		_	Oxidized Rhizospheres on Living Crayfish Burrows (C8)						
	ent Deposits (B2)			Roots (C3) Saturation Visible on Aerial Imager						
Drift De	eposits (B3)		_	Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)						
Algal M	lat or Crust (B4)			F	Recent I	ron Redu	iction in T	Filled Soils Geomor	phic Position (D2)	
Iron De	eposits (B5)			(	(C6)			FAC-Net	utral Test (D5)	
Inunda	tion Visible on Ae	rial Imaç	gery (B7)	1	Thin Mu	ck Surfac	e (C7)			
Sparse	ly Vegetated Con	cave Su	rface (B8)	(	Gauge c	or Well Da	ata (D9)			
Water-	Stained Leaves (E	39)	_	(	Other (E	xplain in	Remarks	3)		
Field Observa	ations:									
Surface Wate	r Present?	Yes	N	<b>)</b>	Х	Depth (ir	nches):	14/-	tional Hudrolom.	
Water Table F		Yes	No	)	Х	Depth (ir		we	tland Hydrology Present?	
Saturation Pre		Yes	N	) _	Х	Depth (ir	nches):		No No	
(includes capi										
Describe Reco	orded Data (strear	m gauge	e, monitoring	vell,	, aerial p	hotos, pr	evious in	spections), if available:		
Demerter										
Remarks:										







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Regior	า	
Project/Site:	Lake Ch	narlotte	City/	County:	Marti	<u>า</u>	Sampling	Date:	10/26/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	WB102A
Investigator(s):		Susan Mayer		Sectio	n, Townshij	o, Range:		Sec.21 T	103N R30W
Landform (hillslope, terrac	e, etc.):	Depress	sion	Local re	elief (concav	/e, convex	k, none):		Concave
Slope (%): 2	Lat:	43.71402		Long:	-94.447	'16	Datum:		WGS84
Soil Map Unit Name:	Canisteo-C	Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA
Are climatic/hydrologic cor	nditions of t	he 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	s present? No
Are vegetation	, soil	, or hydrology		naturally prol	blematic?	(If ne	eded, exp	lain any a	nswers in remarks.)
SUMMARY OF FIND	INGS								
Hydrophytic Vegetati	on Present	? Yes							
Hydric Soil Present?		Yes		Is the sa	mpled area	within a	wetland?		Yes
Wetland Hydrology P	'resent?	Yes		lf yes, op	tional wetla	nd site ID:	:	WB102	
Remarks:									
Recently tilled agricultur			0	al field.					
VEGETATION Use	scientifi			<b>D</b>					
Trace Christian (D	-4	,		Dominant	Indicator	Domir	nance Test	Workshe	et
	ot size:	)	% Cover	Species	Status		er of Domina	•	o (A)
1 2.						that are	e OBL, FAC	W, or FAC	0 (A)
3.							lumber of D s Across Al		(B)
4						Percer	nt of Domina	Int Species	
5							e OBL, FAC		
		、 <del>-</del>		=Total Cover		_			
Sapling/Shrub Stratum	(Plot size:	)					lence Inde		
1 2.						_	% Cover of species	x 1	Multiply by:
3.							V species		 ? =
4.							species		B =
5.							species		+ =
				=Total Cover			pecies	x 5	
Herb Stratum	(Plot size:	)				Colum	nn totals	(A	A) (B)
1.						Preva	lence Inde	k = B/A =	
2.									
3						Hydro	ophytic Ve	getation l	ndicators:
4							•	, ,	hytic vegetation
							Dominance		
	-					_	Prevalence		
7 8									itions* (provide marks or on a
9.							separate s		
10.								,	/tic vegetation*
				=Total Cover			(explain)	,	0
Woody Vine Stratum 1.		)				*Indicate	,		land hydrology must be lematic
2		-		=Total Cover		Veç	drophytic getation sent?	Yes	
Remarks: (Include photo n			te sheet)						

WB102A

Profile Descr	ription: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)			
Depth	Matrix		_	dox Feat							
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks			
0-40	10YR 2/1	100		,,,			Clay				
0+0	1011(2/1	100					Ciay				
*T		L Division									
,, ,,	Concentration, D	= Deple	tion, RM = Redu	ced Mati	rix, MS =	Masked		on: PL = Pore Lining, M = Matrix			
Hydric Soil						(0.1)	Indicators for Proble	•			
	stosol (A1)				ed Matrix	(S4)		dox (A16) (LRR K, L, R)			
	stic Epipedon (A2)	1		ndy Redo	. ,		Dark Surface (S7				
Bla	ack Histic (A3)		Stri	pped 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)			
Sti	ratified Layers (A5	)	Loa	amy Gley	ed Matrix	: (F2)	X Other (explain in	remarks)			
2 0	cm Muck (A10)		De	oleted Ma	atrix (F3)						
De	pleted Below Darl	k Surfac	e (A11) Re	dox Dark	Surface	(F6)					
Th	ick Dark Surface (	(A12)	De	oleted Da	ark Surfac	ce (F7)	*Indicators of hydrop	nytic vegetation and wetland			
Sa	indy Mucky Minera	al (S1)	Re	dox Depr	essions (	F8)		esent, unless disturbed or			
	m Mucky Peat or				· · · · ·	,	problematic				
	-										
	ayer (if observed	l):					Ukudaia Cail Daasaa				
Type:					-		Hydric Soil Presen	t? Yes			
Depth (inches	<i></i>				-						
Remarks:											
A12 Assume	d										
HYDROLO	GY										
Wetland Hyd	rology Indicators	s:									
Primary Indica	ators (minimum of	one is r	equired; check a	ll that ap	<u>ply)</u>		Secondary Indica	tors (minimum of two required)			
Surfac	e Water (A1)			Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)			
	Vater Table (A2)				uatic Plar			e Patterns (B10)			
0	tion (A3)			Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2							
	Marks (B1)			Oxidized Rhizospheres on Living Crayfish Burrows (C8)							
	ent Deposits (B2)			Roots (C3) X Saturation Visible on Aerial Imagery							
	eposits (B3)			Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)							
	Aat or Crust (B4)			Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2)							
	eposits (B5)			(C6)				utral Test (D5)			
	tion Visible on Ae	rial Ima	uerv (B7)		ick Surfac	e (C7)					
	ely Vegetated Con				or Well Da	. ,					
·	Stained Leaves (E			0	Explain in	· · /	;)				
	```	-,	. <u> </u>				,				
Field Observ Surface Wate		Voc	No	v	Donth /:-	achae);					
Water Table F		Yes Yes	No No	X X	Depth (ii Depth (ii	· _	We	tland Hydrology			
Saturation Pre		Yes	No	X	Depth (ii Depth (ii			Present? Yes			
(includes capi		162		^		iciies).		165			
· ·		m (191) (1	monitoring wel	laerialr	hotos pr		spections), if available:				
Describe Rec		in yauyi	, monitoring wei	i, aciiai þ	notos, pi		spections, it available.				
Remarks:											
. tomunto.											

Project/Site:	WET Lake Ch	LAND DETER	City/County:		- Midwes	t Region Sampling Date:	10/26/2022
Applicant/Owner:		Lake Charlotte So		State:		Sampling Point:	WB102B
Investigator(s):		Susan Mayer	•	ection, Towns			21 T103N R30W
Landform (hillslope, terra		Hillslop		cal relief (cond			Convex
Slope (%): 3	Lat:	43.71395	Long:		4677	Datum:	WGS84
Soil Map Unit Name:		Glencoe complex, (	<b>ü</b>				NA
Are climatic/hydrologic co						ain in remarks)	
		, or hydrology	-	antly disturbed	_```	normal circumsta	nces present? No
		, or hydrology		/ problematic?			y answers in remarks.)
SUMMARY OF FIN		, er nyareregy		, p	(		
Hydrophytic Vegeta	ation Present	? No					
Hydric Soil Present	?	No	ls th	e sampled ar	ea within a	wetland?	No
Wetland Hydrology	Present?	No	lf ye	s, optional we	tland site ID:	WB1	02
Remarks:			· ·				
Recently harvested a	gricultural fie	ld.					
VEGETATION Us	se scientifi	c names of pla	nts.				
			bsolute Domina	nt Indicato	r Domir	ance Test Work	sheet
Tree Stratum (1	Plot size:	)	% Cover Specie	es Status	Numbe	r of Dominant Spe OBL, FACW, or F	
2 3						umber of Dominar s Across All Strata	
5						t of Dominant Spe OBL, FACW, or F	
		_	=Total C	Cover			
Sapling/Shrub Stratum	(Plot size:	)				lence Index Wor	
						% Cover of:	Multiply by:
2 3						pecies / species	x 1 =
З Л						pecies	x 2 = x 3 =
5.						species	x 4 =
			=Total C	Cover		pecies	x 5 =
Herb Stratum	(Plot size:	)				n totals	(A) (B)
1 2.					Preva	lence Index = B/A	.=
3.					Hvdro	phytic Vegetatio	on Indicators:
4.					-		rophytic vegetation
5						Dominance test is	s >50%
6						Prevalence index	is ≤3.0*
7							aptations* (provide
8							Remarks or on a
9						separate sheet)	
10						-	ophytic vegetation*
Woody Vine Stratum	(Plot size:	)	=Total C	Jover	*Indicato	(explain) rs of hydric soil and unless disturbed or	wetland hydrology must be problematic
2			=Total C	Cover	Veg	Irophytic etation sent? <u>N</u>	<u> </u>
2	numbers he	re or on a separate	=Total C	Cover	Veg	etation	<u>0</u>

WB102B

Profile Descr	ription: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth	Depth <u>Matrix</u>			dox Feat	tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-21	10YR 2/1	100					Clay			
21-30	2.5Y 5/3	97	2.5Y 6/4	3	С	PL/M	Clay	Faint		
21-30	2.51 5/3	97	2.51 0/4	3	C	PL/M	Clay	Faint		
*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*:		
-	stosol (A1)		Sa	ndy 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			
	cm Muck (A10)	)			atrix (F3)	( ( Z)		Temanoj		
	pleted Below Darl	< Surfac			Surface	(E6)				
			· · _			. ,				
	ick Dark Surface (	,			ark Surfac	. ,		nytic vegetation and wetland		
	ndy Mucky Minera	` '		dox Depi	ressions (	(F8)	problematic	esent, unless disturbed or		
50	m Mucky Peat or	Peat (S	3)			1				
Restrictive L	ayer (if observed	):								
Туре:					-		Hydric Soil Presen	t? <u>No</u>		
Depth (inches	s):				_					
Remarks:										
HYDROLO	GY									
Wetland Hyd	rology Indicators	5:								
Primary Indica	ators (minimum of	one is r	equired; check a	Il that ap	ply)		Secondary Indica	ators (minimum of two required)		
Surfac	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)		
	/ater Table (A2)			-	uatic Plai			e Patterns (B10)		
0	tion (A3)			- '	en Sulfide	· · ·		Dry-Season Water Table (C2)		
	Marks (B1)				d Rhizosp	•	· ·	Crayfish Burrows (C8)		
	ent Deposits (B2)			Roots (0	on Visible on Aerial Imagery (C9)					
	eposits (B3)			Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)						
	Aat or Crust (B4)			Recent	phic Position (D2)					
Iron De	eposits (B5)			(C6)				utral Test (D5)		
	tion Visible on Ae	rial Imag	gery (B7)	- · · ·	ick Surfac	ce (C7)		、 <i>,</i>		
	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		Yes	No	X	Depth (i			Present? No		
(includes capi										
· ·		m gauge	e, monitoring we	ll, aerial r	photos, pr	evious in	spections), if available:			
					•••					
Remarks:		-								






Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

Wetland ID WB105

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	st Regio	n	
Project/Site:	Lake Ch	narlotte	City/	County:	Martin	n	Sampling	Date:	10/26/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	WB105A
Investigator(s):		Susan Mayer		Secti	on, Townshi	p, Range:		Sec.17 T	103N R30W
Landform (hillslope, terrac	e, etc.):	Depress	sion	Local r	elief (concav	ve, conve	k, none):		Concave
Slope (%): 1	Lat:	43.72369		Long:	-94.451	66	Datum:		WGS84
Soil Map Unit Name:	Delft clay I	oam, 0 to 2 perce	nt slopes		NW	I Classific	ation:		NA
Are climatic/hydrologic cor	nditions of t	he site typical for	this time c	of the year?	Yes (	If 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?	(If ne	eded, exp	lain any a	nswers in remarks.)
SUMMARY OF FIND	INGS								
Hydrophytic Vegetati	on Present	? Yes							
Hydric Soil Present?		Yes		Is the sa	ampled area	a within a	wetland?		Yes
Wetland Hydrology P	resent?	Yes		lf yes, o	otional wetla	nd site ID:	:	WB105	
Remarks:									
Recently tilled agricultur			0	al field.					
VEGETATION Use	scientifi	•		Dominant	Indicator	Domi	nance Tes	Worksha	ot
Tree Stratum (PI	ot size:	)		Species	Status	Domin	lance res	I WOIKSING	CL.
1.		/		Opecies	Olalus				<b>0</b> (A)
2							e OBL, FAC		(///
3.							Sumber of E Across A		(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:	) -			-1	Preva	lence Ind	ex Worksh	eet
1.	(1.101.01201	,					% Cover o		Multiply by:
2.							species		=
3.						FACV	V species	x 2	2 =
4.						FAC s	species	x 3	3 =
5						FACL	l species		l =
		-		=Total Cove	r	UPL s	species	x 5	
Herb Stratum	(Plot size:	)				Colun	nn totals	(/	A)(B)
1						Preva	lence Inde	x = B/A =	
3 4								-	ndicators: hytic vegetation
5							Dominanc	• •	
6							Prevalence		
7.						_			ations* (provide
8.							supporting	data in Re	emarks or on a
9.							separate s	heet)	
10							Problemat	ic hydroph	vtic vegetation*
				=Total Cove	r	<u>_X</u>	(explain)		
Woody Vine Stratum 1.		)					ors of hydric unless distu		land hydrology must be plematic
2				Tatal O	-		drophytic		
		-		=Total Cove	۲	-	sent?	Yes	
Remarks: (Include photo n	umbers he	re or on a separa	te sheet)						
Recently tilled agricultural	field. Bare	ground: 100%							

Profile Descr	iption: (Describe	e 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
0-40	10YR 2/1	100					Clay	
*Type: C =	Concentration, D	= Deple	tion RM = Redu	ced Mat	ix MS =	Masked	Sand Grains **Locatio	on: PL = Pore Lining, M = Matrix
Hydric Soil		Dopie		ood maa	ix, me	mached	Indicators for Proble	0
•	stosol (A1)		Sa	ndv Glev	ed Matrix	(S4)		dox (A16) (LRR K, L, R)
	stic Epipedon (A2)	<b>`</b>		ndy Redo		(0.)	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		X Other (explain in	, ,
	m Muck (A10)	')			atrix (F3)	(12)		remarks)
	pleted Below Darl	k Surfac			Surface	(F6)		
	ick Dark Surface (		· · · ·		ark Surfac	• •		
	ndy Mucky Minera	` '			essions (			nytic vegetation and wetland esent, unless disturbed or
	m Mucky Peat or				00010110 (	10)	problematic	
			- ,			1		
Type:	ayer (if observed	1):					Hydric Soil Presen	t? Yes
Depth (inches	).						Hyunc Son Fresen	
	····							
Remarks:								
A12 Assumed	d							
HYDROLO	CV.							
	o I rology Indicators							
-	ators (minimum of		equired: check a	ll that an	nlv)		Secondary Indica	ators (minimum of two required)
	e Water (A1)				Fauna (B	212)	· · · · · ·	Soil Cracks (B6)
					•	,		( ),
	/ater Table (A2)				uatic Plar en Sulfide			e Patterns (B10)
	tion (A3) Marks (B1)			, , ,	d Rhizosp	``	· ·	son Water Table (C2) Burrows (C8)
	ent Deposits (B2)			Roots (C		meres or	<u> </u>	on Visible on Aerial Imagery (C9)
	eposits (B3)				e of Red	uced Iron		or Stressed Plants (D1)
	fat or Crust (B4)							phic Position (D2)
	eposits (B5)			(C6)				utral Test (D5)
	tion Visible on Ae	rial Imad	perv (B7)		ck Surfac	ce (C7)		
	ly Vegetated Con				or Well Da			
	Stained Leaves (E			-	Explain in	• •	5)	
Field Observ	ations:	,					,	
Surface Wate		Yes	No	Х	Depth (ii	nches):		
Water Table F		Yes	No	X	Depth (ii	· -	We	tland Hydrology Present?
Saturation Pre	esent?	Yes	No	Х	Depth (ii			Yes
(includes capi								
Describe Rec	orded Data (strea	m gauge	e, monitoring wel	l, aerial p	photos, pr	revious in	spections), if available:	
Dana 1								
Remarks:								

	WETL	AND DETER	MINAT	ION DATA	FORM -	Midwes	st Regio	n	
Project/Site:	Lake Cha	lotte	City	County:	Martin	ı	Sampling	Date:	10/26/2022
Applicant/Owner:	La	ake Charlotte S	olar, LLC		State:	MN	Sampling	Point:	WB105B
Investigator(s):	Su	ısan Mayer		Section	on, Township	, Range:		Sec.17 T	103N R30W
Landform (hillslope, terrae	ce, etc.):	Hillslo	ре	Local r	elief (concav	e, convex	(, none):		None
Slope (%): 3	Lat:	43.72375		Long:	-94.451	44	Datum:		WGS84
Soil Map Unit Name:		m, 0 to 2 perce				Classifica			NA
Are climatic/hydrologic cc	onditions of the	site typical for	this time of	of the year?	Yes (I	f no, expla	ain in rema	ırks)	
Are vegetation X		, or hydrology		Significantly	disturbed?	Are "	normal circ	cumstance	s present? No
Are vegetation SUMMARY OF FINI		, or hydrology		naturally pro	blematic?	(If ne	eded, exp	lain any a	nswers in remarks.)
Hydrophytic Vegetat	tion Present?	No							
Hydric Soil Present?	?	No		Is the sa	ampled area	within a	wetland?		Νο
Wetland Hydrology I	Present?	No		lf ves. or	otional wetlar	nd site ID:		WB105	
Remarks:							·		
Recently tilled agricultu	ral field.								
VEGETATION Us	e scientific	names of pla	ants.						
			Absolute	Dominant	Indicator	Domir	nance Tes	t Workshe	et
Tree Stratum (F	Plot size:			Species	Status		er of Domina e OBL, FAC		<b>0</b> (A)
2. 3.							lumber of D s Across Al		(B)
4 5							nt of Domina e OBL, FAC		
		_		=Total Cove	r				
Sapling/Shrub Stratum							lence Inde		
1						_	% Cover of		Multiply by:
2 3							species V species	X `	l =
4.						-	species		2 = 3 =
5.						-	J species		4 =
				=Total Cove	r	-	species		
Herb Stratum	(Plot size:	)		-		Colum	nn totals	(/	A) (B)
1						Preva	lence Inde	x = B/A =	
2 3						Hydro	onhytic Ve	detation 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								ic hydroph	ytic vegetation*
		,		=Total Cove	r		(explain)		
Woody Vine Stratum							ors of hydric unless distu		land hydrology must be plematic
2				=Total Cove	r	Veg	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo Recently tilled agricultura			te sheet)						

WB105B

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		
0-14	10YR 2/1	100					Clay			
14-22	2.5Y 5/3	50					Clay			
14-22							City			
	10YR 2/1	50						Mixed Matrix		
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Matr	rix, MS =	Masked	Sand Grains. **Location	on: 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)		Sai	ndy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)		
Bla	ack Histic (A3)		Stri	pped 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)		
Str	atified Layers (A5	)	Loa	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)		
2 c	m Muck (A10)		De	pleted Ma	atrix (F3)					
De	pleted Below Darl	< Surfac	e (A11) Re	dox Dark	Surface	(F6)				
Thi	ick Dark Surface (	A12)	De	oleted Da	ark Surfac	ce (F7)	*Indicators of hvdrop	nytic vegetation and wetland		
Sa	ndy Mucky Minera	al (S1)	Re	dox Depr	essions (	F8)		esent, unless disturbed or		
5 0	m Mucky Peat or	Peat (S	3)				problematic			
Restrictive L	ayer (if observed	).								
Type:		<i>.</i>					Hydric Soil Presen	t? No		
	Depth (inches):									
• 、	,									
Remarks:										
	0.1/									
HYDROLO										
-	rology Indicators		a au tina alta alta alta a				Concerndant, India			
-	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			e Patterns (B10)		
	tion (A3)				en Sulfide					
	Marks (B1)				d Rhizosp	heres on		Burrows (C8)		
	ent Deposits (B2)			Roots (C				on Visible on Aerial Imagery (C9)		
	eposits (B3)				e of Red			or Stressed Plants (D1)		
	At or Crust (B4)				Iron Redu	iction in		phic Position (D2)		
	eposits (B5)			(C6)	al. Curfa	(07)	FAC-Ne	utral Test (D5)		
	tion Visible on Ae				ick Surfac	. ,				
·	ly Vegetated Con		Ifface (B8)		or Well Da		- )			
vvater-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	S)			
Field Observ					<b>_</b>					
Surface Wate		Yes	No No	X	Depth (ii		We	tland Hydrology		
Water Table F		Yes	No No	X X	Depth (ii			Present?		
Saturation Pre (includes capi		Yes	No	Х	Depth (ii	nones).		No		
· · ·		m ຕອບດ	e monitoring wel	l aerial r	hotos pr	evious in	spections), if available:			
20001001100	2. 300 Duiu (01100	guuyt		., aona p		511005 11				
Remarks:										







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

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s/Nat

Wetland ID WB109

Project/Site:	WET Lake Ch	LAND DETER		ON DAT	A FORM Mar		st Region Sampling		10/26/2022
Applicant/Owner:		Lake Charlotte So		···· , _	State:	MN	Sampling I		WB109A
Investigator(s):		Susan Mayer		Sec	tion, Townsl	nip, Range:			103N R30W
Landform (hillslope, ter	race, etc.):	Depress	ion			ave, convex			Concave
Slope (%): 0	Lat:	43.71814		Long:	-94.44		Datum:		WGS84
Soil Map Unit Name:	Canisteo-G	lencoe complex, (	0 to 2 per	cent slopes	N	WI Classifica	ation:		NA
Are climatic/hydrologic		-				(If no, expla		rks)	
		, or hydrology		-	ly disturbed	•	normal circ		s present? No
Are vegetation		, or hydrology		-	roblematic?				nswers in remarks.)
SUMMARY OF FI				,		<b>X</b> -	, - <b> </b>	,, <b>,</b> ,	,
Hydrophytic Vege	tation Present	? Yes							
Hydric Soil Preser	nt?	Yes		Is the s	sampled are	ea within a	wetland?		Yes
Wetland Hydrolog	y Present?	Yes		lf yes, o	optional wet	land site ID:		WB109	
Remarks:									
Recently harvested	agricultural fie	d.							
VEGETATION L	Jse scientifi	•							
				Dominant	Indicator	Domir	nance Test	Workshe	et
Tree Stratum 1.	(Plot size:	)	% Cover	Species	Status		er of Domina e OBL, FAC		
3							lumber of D s Across All		(B)
4 5.							it of Domina e OBL, FAC		
				=Total Cov	ver			,	
Sapling/Shrub Stratum	n (Plot size:	)				Preva	lence Inde	x Worksh	eet
1						Total	% Cover of	:	Multiply by:
2							species		=
3							v species		? =
4							species		B =
5				=Total Cov			species	X 4	
Herb Stratum	(Plot size:	、 <del>_</del>			rei		pecies nn totals		·
<u>1.</u>	(FIOL SIZE.	)					lence Inde	·	(B)
2.						Tieva		( = D/A =	
3						Hvdro	ophytic Ve	getation I	ndicators:
4								-	hytic vegetation
5							Dominance	e test is >5	0%
6							Prevalence	e index is ≤	3.0*
7.							Morphologi	ical adapta	itions* (provide
8							supporting	data in Re	marks or on a
9							separate sl		
10								c hydroph	/tic vegetation*
				=Total Cov	ver	<u> </u>	(explain)		
Woody Vine Stratum 1.	(Plot size:	)					ors of hydric s unless distu		land hydrology must be olematic
2				=Total Cov	ver	Veg	drophytic jetation sent?	Voo	
Remarks: (Include phot	to numbers ha		a chaot)				-	Yes	
itemarks. (include phot			e sneet)						
Harvested agricultural f	field. Bare grou	nd: 100%							

WB109A

Profile Descr	ription: (Describe	e 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					Clay	
	-							
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mati	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 Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)
	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	. ,	X Other (explain in	, ,
	cm Muck (A10)				atrix (F3)	、 /		,
	pleted Below Darl	k Surfac			Surface	(F6)		
	ick Dark Surface (		· · ·		ark Surfac	. ,	*I	
	ndy Mucky Minera	. ,			essions (			nytic vegetation and wetland esent, unless disturbed or
	m Mucky Peat or				63310113 (	10)	problematic	
			5)			1		
	ayer (if observed	I):						
<u> </u>	drain				-		Hydric Soil Preser	t? Yes
Depth (inches	s): <u>26</u>				-			
Remarks:								
A12 Assume	d							
HYDROLO	GV							
	rology Indicators							
-	ators (minimum of		equired: check a	ll that an	nlv)		Secondary Indic	ators (minimum of two required)
	e Water (A1)	0110 13 1			Fauna (B	12)		Soil Cracks (B6)
				•				
	/ater Table (A2)			•	uatic Plar	· · ·		e Patterns (B10)
	tion (A3)				en Sulfide		· · ·	son Water Table (C2)
	Marks (B1)				d Rhizosp	neres on		Burrows (C8)
	ent Deposits (B2) eposits (B3)			Roots (C	co) ce of Redu	ucod Iron		on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
	Aat or Crust (B4)						. ,	phic Position (D2)
	eposits (B5)			(C6)	non Keut			utral Test (D5)
	tion Visible on Ae	rial Ima	nery (B7)	•	ick Surfac	e (C7)		
	ely Vegetated Con				or Well Da	. ,		
	Stained Leaves (E			-	Explain in		2)	
	`		. <u> </u>			Nomarka	<i>י</i> י	
Field Observ		V	×1 -	v	Denth /	nah sa`		
Surface Wate		Yes	No No	X X	Depth (ii		We	etland Hydrology
Water Table F Saturation Pre		Yes	No No	X	Depth (ii			Present?
(includes capi		Yes		^	Depth (ii			Yes
· · ·		mana		lacrict	hotos pr		spections), if available:	
	Sidea Dala (Siled	yauyt	s, monitoring wei	i, acriai þ	, ioios, pi	CVIOUS III	opoolions, il available.	
Remarks:								
oniano.								

Project/Site:	WETL Lake Cha	AND DETER		ON DAT	A FORM - Mart		t Region Sampling D	lato.	10/26/2022
Applicant/Owner:		ake Charlotte So			State:		Sampling P		WB109B
Investigator(s):		usan Mayer	iai, 220	Sect	ion, Townsh				03N R30W
Landform (hillslope, terrac		Hillslop	A		relief (conca			000.11 11	None
Slope (%): 3	Lat:	43.7181		Long:	-94.44		Datum:	,	WGS84
,		encoe complex, (	) to 2 per	· -					NA
Are climatic/hydrologic co							ain in remarl		
		, or hydrology		-	y disturbed?	· · ·	normal circu	,	present? No
·		, or hydrology		-	oblematic?				swers in remarks.
					oblematic	(ii nei	eueu, expie	an any and	
Hydrophytic Vegetati	on Present?	No							
Hydric Soil Present?		No		Is the s	ampled are	a within a	wetland?		No
Wetland Hydrology F	Present?	No		lf yes, c	ptional wetla	and site ID:		WB109	
Remarks:									
Recently harvested ag	ricultural field	Ι.							
VEGETATION Use	e scientific	•							
Taxa Questions (D)				Dominant	Indicator	Domin	ance Test	Worksheet	1
Tree Stratum (P	lot size:	)	% Cover	Species	Status		r of Dominar OBL, FACV		0 (A)
2 3							umber of Do s Across All 3		0 (B)
5							t of Dominan OBL, FACV		% (A/B)
				=Total Cov	er		,	.,	` ` `
Sapling/Shrub Stratum	(Plot size:	)				Preva	lence Index	Workshe	et
1						Total 9	% Cover of:	N	lultiply by:
2.							pecies		:
3							species		=
4							pecies		·
5				Tatal Oa			species		:
Llash Chratum		, —		=Total Cov	er		pecies		
Herb Stratum	(Plot size:	)					in totals	(A)	(B)
1 2						Fieva	ence muex	= D/A =	
3.						Hydro	phytic Veg	etation Inc	licators:
A						-			tic vegetation
5							Dominance		-
6						— — I	Prevalence	index is ≤3	.0*
7.						ı	Morphologic	al adaptati	ons* (provide
8.						5	supporting c	lata in Rem	arks or on a
9.						5	separate sh	eet)	
10						I	Problematic	hydrophyti	c vegetation*
				=Total Cov	er	(	(explain)		
Woody Vine Stratum 1.	(Plot size:	)					rs of hydric so unless disture		nd hydrology must be matic
2				=Total Cov	er	Veg	rophytic etation sent?	<u>No</u>	
Remarks: (Include photo r Harvested agricultural field			e sheet)						

WB109B

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			
0-23	10YR 2/1	100					Clay				
23-34	2.5Y 3/2	75					Clay				
	2.5Y 4/4	15						Mixed Matrix			
	10YR 2/1	10						Mixed Matrix			
*Type: C =	Concentration, D	= Deple	tion RM = Redu	iced Mati	ix MS =	Masked S	Sand Grains **Locatio	n: PL = Pore Lining, M = Matrix			
Hydric Soil		Dopie			ix, iiio	Mashea	Indicators for Proble	0			
-	stosol (A1)		Sa	ndv Glav	ed Matrix	(\$4)		dox (A16) (LRR K, L, R)			
	stic Epipedon (A2)			ndy Redo		(04)	Dark Surface (S7				
				-							
	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)	Other (explain in	remarks)			
	m Muck (A10)	- ·		•	atrix (F3)						
	pleted Below Dark		· · · · · · · · · · · · · · · · · · ·		Surface						
	ick Dark Surface (	,			ark Surfac	. ,		nytic vegetation and wetland			
Sa	ndy Mucky Minera	al (S1)	Re	dox Depr	essions (	F8)		esent, unless disturbed or			
5 c	m Mucky Peat or	Peat (S	3)				problematic				
Restrictive La	ayer (if observed	):									
Type:		,					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	II that ap	<u>ply)</u>		Secondary Indica	tors (minimum of two required)			
Surface	e Water (A1)			Aquatic	Fauna (B	13)	Surface	Surface Soil Cracks (B6)			
Hiah W	/ater Table (A2)			True Aa	uatic Plar	nts (B14)	Drainage Patterns (B10)				
	tion (A3)				en Sulfide	```		Dry-Season Water Table (C2)			
	Marks (B1)				d Rhizosp						
	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 Imad	perv (B7)	•	ck Surfac	e (C7)					
	ly Vegetated Con				or Well Da	. ,					
	Stained Leaves (E			-	xplain in		5)				
Field Observ		,			•						
Surface Wate		Yes	No	Х	Depth (ii	nchee).					
Water Table F		Yes	No	× X	Depth (ii	· _	We	tland Hydrology			
Saturation Pre		Yes	No	X	Depth (ii			Present? No			
(includes capi											
· ·		n aauae	e, monitorina wel	l, aerial r	hotos. pr	evious in	spections), if available:				
		9709	,	, P	, e		-1 , a ranao o -				
Remarks:											







Source: Map adapted from Hybrid NAIP Server; Elevation by MN DNR; Project data by Lake Charlotte Solar, LLC; Tetra Tech Wetlands. Scale: 1:1,000

APPENDIX D: POND, LAKE, AND STREAM PHOTOGRAPHS

Pond ID: PA020

Overview of pond PA020.	

Lake ID: LA029



Lake ID: LA046

	Overview of lake LA046 (Lake Charlotte).	
Direction: South	Photo ID: f_photo-20221020-213552.jpg	Date: 10/20/2022

Project Name:	Survey Date:		Stream ID:	
Lake Charlotte	10/18/2022		SA001	
Stream Classification:	Stream Flow I	Rate:	Stream Water Clarity:	
R4SBA	Dry		Not Applicable	
Average Width from Top of Bank:	Average Dept	h from Top of Bank:	Average Water Depth:	
6 feet	3 feet		0 Inches	
Stream Inorganic Substrate Componer	its:	Stream Organic Sub	strate Components:	
☑ Clay		🗹 Detritus (sticks, v	wood, coarse plant material)	
☑ Silt		Muck-Mud (very	fine organic, black)	
☑ Sand		Marl (grey, shell	fragments)	
☑ Gravel (0.1"-2.5")				
□ Cobble (2.5"-10")				
☑ Boulder (>10")				
Bedrock				
☑ Riprap/Concrete				
Stream Characteristics Observed:				
☑ Bed				
☑ Bank				
☑ Natural line impressed on the bank				
☑ Shelving				
□ Changes in the character of soil				
☑ Destruction of terrestrial vegetatio	n			
☑ Presence of litter and debris				
☑ Vegetation matted down, bent, or	absent			
□ Leaf litter disturbed or washed awa				
Sediment deposition	-			
□ Water staining				
□ Presence of wrack line				
☑ Sediment sorting				
☑ Scour				
□ Abrupt change in plant community				
□ Fish				
Crayfish or Crayfish Burrows				
□ Tadpoles				

## Project Name: Lake Charlotte



Upstream Photograph of SA001. Direction: Southwest



Downstream Photograph of SA001. Direction: East

Project Name:	Survey Date:		Stream ID:	
Lake Charlotte	10/18/2022		SA005	
Stream Classification:	Stream Flow F	Rate:	Stream Water Clarity:	
R4SBC	Dry		Not Applicable	
Average Width from Top of Bank:	Average Dept	h from Top of Bank:	Average Water Depth:	
12 feet	4 feet		0 Feet	
Stream Inorganic Substrate Componen	ts:	Stream Organic Sub	strate Components:	
🗹 Clay		🗹 Detritus (sticks, v	wood, coarse plant material)	
☑ Silt		Muck-Mud (very	fine organic, black)	
☑ Sand		Marl (grey, shell	fragments)	
☑ Gravel (0.1"-2.5")				
☑ Cobble (2.5"-10")				
☑ Boulder (>10")				
Bedrock				
□ Riprap/Concrete				
Stream Characteristics Observed:				
☑ Bed				
☑ Bank				
☑ Natural line impressed on the bank				
☑ Shelving				
□ Changes in the character of soil				
Destruction of terrestrial vegetation	ı			
☑ Presence of litter and debris				
☑ Vegetation matted down, bent, or a				
□ Leaf litter disturbed or washed awa	У			
☑ Sediment deposition				
<ul> <li>Water staining</li> <li>Presence of wrack line</li> </ul>				
<ul> <li>✓ Presence of wrack line</li> <li>✓ Sediment sorting</li> </ul>				
☑ Scour				
□ Abrupt change in plant community				
□ Fish				
Crayfish or Crayfish Burrows				
□ Tadpoles				

## Project Name: Lake Charlotte



Upstream Photograph of SA005. Direction: Northeast



Downstream Photograph of SA005. Direction: Southwest

Photograph Date:10/18/2022

Project Name:	Survey Date:		Stream ID:	
Lake Charlotte	10/19/2022		SA016	
Stream Classification:	Stream Flow Rate:		Stream Water Clarity:	
R4SBA	Dry		Not Applicable	
Average Width from Top of Bank:	Average Dept	h from Top of Bank:	Average Water Depth:	
3 feet	2 feet		0 Feet	
Stream Inorganic Substrate Componer	nts:	Stream Organic Substrate Components:		
🗹 Clay		🗹 Detritus (sticks, v	wood, coarse plant material)	
☑ Silt		🛛 Muck-Mud (very	fine organic, black)	
☑ Sand		Marl (grey, shell	fragments)	
☑ Gravel (0.1"-2.5")				
☑ Cobble (2.5"-10")				
☑ Boulder (>10")				
Bedrock				
□ Riprap/Concrete				
Stream Characteristics Observed:				
☑ Bed				
☑ Bank				
☑ Natural line impressed on the bank				
☑ Shelving				
□ Changes in the character of soil				
☑ Destruction of terrestrial vegetatio	n			
☑ Presence of litter and debris				
Vegetation matted down, bent, or	absent			
□ Leaf litter disturbed or washed awa				
□ Sediment deposition	,			
□ Water staining				
Presence of wrack line				
□ Sediment sorting				
☑ Scour				
<ul> <li>Abrupt change in plant community</li> </ul>				
□ Fish				
Crayfish or Crayfish Burrows				

## Project Name: Lake Charlotte



Upstream Photograph of SA016. Direction: Northeast



Downstream Photograph of SA016. Direction: Southwest

Photograph Date:10/19/2022

## APPENDIX E: OFFSITE HYDROLOGY REVIEW OF NON-WETLAND AREAS

		Ph		# of Years	% of Years		
Non-Wetland Sample Point	July 1, 2010	July 12, 2013	August 1, 2015	September 20, 2017	August 19, 2019	with Wet Signatures	with Wet Signatures
NWA002	CS	CS	NV	CS	NV	3	60%
NWA003	CS	NV	NV	CS	CS	3	60%
NWA008	CS	CS	CS	NV	DO	4	80%
NWA009	DO	CS	CS	NV	CS	4	80%
NWA010	NV	NV	CS	NV	DO	2	40%
NWA011	CS	CS	NV	NV	DO	3	60%
NWA012	NV	NV	NV	NV	DO	1	20%
NWA013	CS	CS	CS	NV	DO	4	80%
NWA014	CS	CS	CS	NV	DO	4	80%
NWA015	CS	CS	CS	NV	DO	4	80%
NWA017	CS	CS	CS	NV	NV	3	60%
NWA021	DO	DO	CS	CS	CS	5	100%
NWA023	CS	NV	NV	NV	DO	2	40%
NWA025	NV	NV	NV	NV	DO	1	20%
NWA026	CS	NV	CS	NV	AP	3	60%
NWA027	CS	CS	DO	CS	CS	5	100%
NWA028	CS	CS	NV	CS	CS	4	80%
NWA030	CS	CS	NV	NV	NV	2	40%
NWA031	CS	CS	CS	NV	CS	4	80%
NWA032	CS	CS	NV	NV	DO	3	60%
NWA033	NV	NV	NV	NV	DO	1	20%
NWA034	CS	NV	NV	NV	DO	2	40%
NWA035	CS	CS	NV	NV	CS	3	60%
NWA038	CS	CS	NV	NV	NV	2	40%
NWA039	CS	CS	CS	NV	NV	3	60%
NWA040	DO	CS	CS	NV	NV	3	60%
NWA041	CS	CS	CS	NV	NV	3	60%
NWA042	CS	DO	CS	CS	CS	5	100%
NWA043	CS	CS	CS	CS	DO	5	100%
NWA044	NV	CS	NV	CS	DO	3	60%
NWA047	SS	NV	NV	NV	AP	2	40%
NWA048	NV	NV	NV	NV	AP	1	20%

Table E-1: Observed Wetland Signatures in Cultivated Non-Wetland Areas in Normal Years

	Photo Interpretation					# of Years	% of Years
Non-Wetland Sample Point	July 1, 2010	July 12, 2013	August 1, 2015	September 20, 2017	August 19, 2019	with Wet Signatures	with Wet Signatures
NWA049	CS	CS	CS	CS	CS	5	100%
NWA050	NV	NV	NV	CS	NV	1	20%
NWA052	CS	DO	NV	NV	NSS	2	40%
NWA053	SS	CS	NV	NV	NV	2	40%
NWA054	CS	CS	NV	CS	AP	4	80%
NWA055	CS	DO	CS	CS	CS	5	100%
NWA058	CS	NV	NV	NV	DO	2	40%
NWA059	NV	CS	NV	NV	DO	2	40%
NWA060	NV	DO	NV	CS	CS	3	60%
NWA061	CS	DO	NV	NV	CS	3	60%
NWA062	NV	DO	NV	NV	NV	1	20%
NWA063	NV	DO	NV	NV	CS	2	40%
NWA064	NV	DO	NV	NV	CS	2	40%
NWA065	CS	DO	CS	CS	CS	5	100%
NWA066	CS	DO	NV	CS	CS	4	80%
NWB067	SW	CS	WS	CS	NV	4	80%
NWB070	NV	DO	NSS	NV	DO	2	40%
NWB071	NV	CS	NV	NV	CS	2	40%
NWB074	CS	CS	CS	NV	DO	4	80%
NWB075	CS	NV	NV	NV	DO	2	40%
NWB076	CS	NV	NV	NV	DO	2	40%
NWB077	CS	CS	NV	NV	NV	2	40%
NWB078	DO	DO	NV	NV	DO	3	60%
NWB082	SW	NV	CS	NV	NV	2	40%
NWB083	SS	NV	CS	NV	NV	2	40%
NWB086	SS	DO	CS	NC	CS	5	100%
NWB091	CS	DO	CS	NV	NV	3	60%
NWB093	NV	CS	NV	NV	DO	2	40%
NWB094	NV	NV	NSS	CS	DO	2	40%
NWB097	CS	CS	NV	NV	CS	3	60%
NWB098	DO	NV	NV	NSS	NV	1	20%
NWB099	CS	CS	NV	NSS	CS	3	60%
NWB100	DO	CS	CS	CS	CS	5	100%

	Photo Interpretation					# of Years	% of Years
Non-Wetland Sample Point	July 1, 2010	July 12, 2013	August 1, 2015	September 20, 2017	August 19, 2019	with Wet Signatures	with Wet Signatures
NWB101	DO	NV	NV	NV	NV	1	20%
NWB103	NC	NC	CS	NC	CS	5	100%
NWB104	CS	CS	CS	CS	DO	5	100%
NWB106	CS	NV	NV	CS	CS	3	60%
NWB107	CS	CS	NV	CS	CS	4	80%
NWB108	CS	NV	NV	NV	DO	2	40%
NWB110	NV	NV	CS	NV	CS	2	40%
NWB111	NV	CS	NV	NV	CS	2	40%
NWB112	NV	CS	NV	NV	DO	2	40%
NWB113	NV	CS	CS	CS	DO	4	80%
NWB114	CS	CS	CS	NV	DO	4	80%
NWB115	CS	CS	CS	NV	DO	4	80%
NWB116	NV	CS	NV	NV	CS	2	40%

CS – Crop Stress DO – Drowned Out

NC - Not Cropped

SW – Standing Water WS – Wetland Signature AP – Altered Pattern

SS – Soil Wetness Signature NV – Normal Vegetative Cover NSS – No Soil Wetness

TETRA TECH

# Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:						
county: Martin township number: 103N						
township name: Rutland	range number: <b>30W</b>					
nearest community: Northrop	section number: 17					

### Aerial photograph or site visit date: Thursday, July 1, 2010

### Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from <u>radar-based estimates</u> .	first prior month: June 2010	second prior month: May 2010	third prior month: April 2010
estimated precipitation total for this location:	7.99	1.92	2.39
there is a 30% chance this location will have less than:	3.55	3.31	2.35
there is a 30% chance this location will have more than:	5.35	5.35	3.86
type of month: dry normal wet	wet	dry	normal
monthly score	3 * <mark>3</mark> = 9	2 * <mark>1</mark> = 2	1 * 2 = 2
multi-month score:           6 to 9 (dry)         10 to 14 (normal)         15 to 18 (wet)	13 (Normal)		

### Aerial photograph or site visit date: Friday, July 12, 2013

### Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from <u>radar-based estimates</u> .	first prior month: June 2013	second prior month: May 2013	third prior month: April 2013
estimated precipitation total for this location:	5.30	5.18	5.03
there is a 30% chance this location will have less than:	3.55	3.31	2.35
there is a 30% chance this location will have more than:	5.35	5.35	3.86
type of month: dry normal wet	normal	normal	wet
monthly score	3 * 2 = 6	2 * 2 = 4	1 * <mark>3</mark> = 3
multi-month score:6 to 9 (dry)10 to 14 (normal)15 to 18 (wet)	13 (Normal)		
# **Precipitation Worksheet Using Gridded Database**

Precipitation data for target wetland location:

county: Martin	township number: 103N
township name: Rutland	range number: <b>30W</b>
nearest community: Northro	p section number: <b>17</b>

## Aerial photograph or site visit date: Saturday, August 1, 2015

## Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from <u>radar-based estimates</u> .	first prior month: July 2015	second prior month: June 2015	third prior month: May 2015
estimated precipitation total for this location:	3.35	3.54	5.44
there is a 30% chance this location will have less than:	2.49	3.55	3.31
there is a 30% chance this location will have more than:	5.10	5.35	5.35
type of month: dry normal wet	normal	dry	wet
monthly score	3 * 2 = 6	2 * <mark>1</mark> = 2	1 * <mark>3</mark> = 3
multi-month score:           6 to 9 (dry)         10 to 14 (normal)         15 to 18 (wet)		11 (Normal)	

### Aerial photograph or site visit date: Wednesday, September 20, 2017

## Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from <u>radar-based estimates</u> .	first prior month: August 2017	second prior month: July 2017	third prior month: June 2017
estimated precipitation total for this location:	4.85	2.35	4.77
there is a 30% chance this location will have less than:	2.72	2.49	3.55
there is a 30% chance this location will have more than:	4.77	5.10	5.35
type of month: dry normal wet	wet	dry	normal
monthly score	3 * <mark>3</mark> = 9	2 * <mark>1</mark> = 2	1 * 2 = 2
multi-month score:6 to 9 (dry)10 to 14 (normal)15 to 18 (wet)		13 (Normal)	)

# Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:								
county: Martin	township number: 103N							
township name: Rutland	range number: <b>30W</b>							
nearest community: Northrop	section number: <b>17</b>							

### Aerial photograph or site visit date: Monday, August 19, 2019

## Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from <u>radar-based estimates</u> .	first prior month: July 2019	second prior month: June 2019	third prior month: May 2019
estimated precipitation total for this location:	5.21	2.41	7.71
there is a 30% chance this location will have less than:	2.49	3.55	3.31
there is a 30% chance this location will have more than:	5.10	5.35	5.35
type of month: dry normal wet	wet	dry	wet
monthly score	3 * <mark>3</mark> = 9	2 * <mark>1</mark> = 2	1 * <mark>3</mark> = 3
multi-month score:           6 to 9 (dry)         10 to 14 (normal)         15 to 18 (wet)		14 (Normal)	1

Project/Site:	WETI Lake Ch	AND DETER		ION DAT	A FORM Mar		St Region Sampling Date:	10/18/2022
Applicant/Owner:		Lake Charlotte Sc	_ `	···· , _	State:	MN	Sampling Point:	NWA002A
Investigator(s):		pryl Jennrich		Sec	tion, Townsh	nip, Range:		7 T103N R30W
Landform (hillslope, terra	ace, etc.):	Depress	sion		relief (conc			Concave
Slope (%): 1	· , -	43.74116		Long:	-94.47		Datum:	WGS84
,	Webster cl	ay loam, 0 to 2 pe	rcent slop	· · ·	N۱	VI Classific	ation:	NA
Are climatic/hydrologic c					Yes	(If no, expla	ain in remarks)	
		, or hydrology		-	ly disturbed?		normal circumsta	nces present? No
		, or hydrology		-	roblematic?			y answers in remarks.)
SUMMARY OF FIN						<b>,</b>		,
Hydrophytic Vegeta	ation Present?	P No						
Hydric Soil Present	:?	No		Is the	sampled are	ea within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes,	optional wetl	and site ID:		
Remarks:								
Recently harvested a	-							
VEGETATION U	se scientific	•						
Taxa Olas kara				Dominant	Indicator	Domir	nance Test Work	sheet
Tree Stratum (	Plot size:	)	% Cover	Species	Status		er of Dominant Spe e OBL, FACW, or I	
2 3							Number of Dominar s Across All Strata	
4 5.							nt of Dominant Spe e OBL, FACW, or I	
				=Total Cov	/er			
Sapling/Shrub Stratum	(Plot size:	)				Preva	lence Index Wo	ksheet
1						Total	% Cover of:	Multiply by:
2							species	x 1 =
3							V species	x 2 =
4								x 3 =
5				Tatal Oa			l species	x 4 =
Lieth Christian	(Dist size)	, —		=Total Cov	/er			x 5 =(D)
Herb Stratum	(Plot size:	)					nn totals lence Index = B/A	(A)(B)
1 2						Fieva	e    e    e    e    e    e    e    e	· =
3						Hydro	ophytic Vegetation	on Indicators
<u> </u>								rophytic vegetation
5							Dominance test is	
6							Prevalence index	is ≤3.0*
7.							Morphological ad	aptations* (provide
8							supporting data in	n Remarks or on a
9							separate sheet)	
10							Problematic hydr	ophytic vegetation*
				=Total Cov	/er		(explain)	
Woody Vine Stratum 1.	(Plot size:	)					ors of hydric soil and unless disturbed or	wetland hydrology must be problematic
2				=Total Cov	ver	Veg	drophytic getation sent? <u>N</u>	lo
Remarks: (Include photo			e sheet)					

NWA002A

Depth (Inches) 0-6 6-10	· ·		· ·				Iuicatoi	or confirm the abse		
0-6	Matrix				dox Fea	1				
	Color (moist)	%	Color (m	oist)	%	Type*	Loc**	Texture	Remarks	
6-10	10YR 2/1	100						Clay Loam Trace Gra	vel	
	10YR 2/1	100						Clay Trace Gravel		
10-12	10YR 3/2	95	2.5Y 5	/3	5	D	М	Clay Trace Gravel		
12-22	2.5Y 5/4	100						Clay Loam Trace Gra	vel	
*Type: C =	Concentration, D	= Deple	tion, RM =	Redu	ced Mat	rix, MS =	Masked \$	Sand Grains. **Lo	ocation: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:							Indicators for Pr	roblematic Hydric Soils*:	
Hi	istosol (A1)		_	Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie	e Redox (A16) (LRR K, L, R)	
Hi	istic Epipedon (A2)	)	_	Sar	ndy Redo	ox (S5)		Dark Surface	e (S7) (LRR K, L)	
	ack Histic (A3)		_			atrix (S6)			nese Masses (F12) (LRR K, L, R)	
	Hydrogen Sulfide (A4)					ky Minera	• •		w Dark Surface (TF12)	
	tratified Layers (A5	5)	_			ed Matrix	: (F2)	Other (expla	ain in remarks)	
	cm Muck (A10)					atrix (F3)				
	epleted Below Dar		e (A11)			Surface	· · /			
	nick Dark Surface	` '	_	_ '		ark Surfac	```		drophytic vegetation and wetland	
	andy Mucky Minera		_	Ree	Redox Depressions (F8) hydrology must be present, unless distu					
5	cm Mucky Peat or	Peat (S	3)					problematic		
Restrictive L	_ayer (if observed	d):								
Туре:						-		Hydric Soil Pro	esent? No	
Depth (inches	s):					-				
HYDROLO	GY									
-	drology Indicators									
-	ators (minimum of	f one is i	equired; cl	neck a				-	ndicators (minimum of two required)	
Surfac	ce Water (A1)					Fauna (B			face Soil Cracks (B6)	
	Water Table (A2)					uatic Plar	` '		inage Patterns (B10)	
	ation (A3)					en Sulfide	•		-Season Water Table (C2)	
	Marks (B1)					d Rhizosp	heres on	J	yfish Burrows (C8)	
	nent Deposits (B2) Deposits (B3)				Roots (	23) ce of Redu	upped Iron		uration Visible on Aerial Imagery (C9)	
	Mat or Crust (B4)							. ,	nted or Stressed Plants (D1) pmorphic Position (D2)	
Drift D					Recont	non iteue				
Drift D Algal I	enosits (B5)				(C6)			FAC	C-Neutral Test (D5)	
Drift D Algal I Iron D	eposits (B5) ation Visible on Ae	erial Ima	nerv (B7)		(C6) Thin Mu	ick Surfac	e (C7)	FAC	C-Neutral Test (D5)	
Drift D Algal I Iron D Inunda	ation Visible on Ae				Thin Mu	ick Surfac or Well Da	. ,	FAC	C-Neutral Test (D5)	
Drift D Algal I Iron D Inunda	ation Visible on Ae ely Vegetated Con	icave Su			Thin Mu Gauge o	or Well Da	ata (D9)		C-Neutral Test (D5)	
Drift D Algal I Iron D Inunda Sparse Water	ation Visible on Ae ely Vegetated Con -Stained Leaves (I	icave Su			Thin Mu Gauge o		ata (D9)		C-Neutral Test (D5)	
Drift D Algal I Iron D Inunda	ation Visible on Ae ely Vegetated Con -Stained Leaves (I vations:	icave Su			Thin Mu Gauge o Other (E	or Well Da Explain in	ata (D9) Remarks			
Drift D Algal I Iron D Inunda Sparse Water	ation Visible on Ae ely Vegetated Con -Stained Leaves (f vations: er Present?	ncave Su B9)		No No	Thin Mu Gauge o	or Well Da	ata (D9) Remarks nches):		Wetland Hydrology	
Drift D Algal I Iron D Inunda Sparse Water Field Observ Surface Wate	ation Visible on Ae ely Vegetated Con -Stained Leaves (I vations: er Present? Present?	ncave Su B9) Yes		No	Thin Mu Gauge o Other (E	or Well Da Explain in Depth (in	ata (D9) Remarks nches):			
Drift D Algal I Iron D Inunda Sparse Water Field Observ Surface Wate Water Table	ation Visible on Ae ely Vegetated Con -Stained Leaves (I vations: er Present? Present? resent?	ncave Su B9) Yes Yes		No No	Thin Mu Gauge o Other (E X X	or Well Da Explain in Depth (in Depth (in	ata (D9) Remarks nches):		Wetland Hydrology Present?	
Drift D Algal I Iron D Inunda Sparse Water Field Observ Surface Wate Water Table Saturation Pr (includes cap	ation Visible on Ae ely Vegetated Con -Stained Leaves (I vations: er Present? Present? resent? billary fringe)	Yes Yes Yes Yes	Irface (B8)	No No No	Thin Mu Gauge o Other (E X X X	Depth (in Depth (in Depth (in Depth (in Depth (in	ata (D9) Remarks nches): _ nches): _ nches): _		Wetland Hydrology Present?No	
Drift D Algal I Iron D Inunda Sparse Water Field Observ Surface Wate Water Table Saturation Pr (includes cap	ation Visible on Ae ely Vegetated Con -Stained Leaves (I vations: er Present? Present? resent? billary fringe)	Yes Yes Yes Yes	Irface (B8)	No No No	Thin Mu Gauge o Other (E X X X	Depth (in Depth (in Depth (in Depth (in Depth (in	ata (D9) Remarks nches): _ nches): _ nches): _	.) 	Wetland Hydrology Present? <u>No</u>	
Drift D         Algal I         Iron D         Inunda         Sparse         Water         Surface Water         Water Table         Saturation Pr         (includes cap         Describe Record	ation Visible on Ae ely Vegetated Con -Stained Leaves (I vations: er Present? Present? resent? billary fringe)	Yes Yes Yes Yes	Irface (B8)	No No No	Thin Mu Gauge o Other (E X X X	Depth (in Depth (in Depth (in Depth (in Depth (in	ata (D9) Remarks nches): _ nches): _ nches): _	.) 	Wetland Hydrology Present? <u>No</u>	
Drift D Algal I Iron D Inunda Sparse Water Field Observ Surface Wate Water Table Saturation Pr (includes cap	ation Visible on Ae ely Vegetated Con -Stained Leaves (I vations: er Present? Present? resent? billary fringe)	Yes Yes Yes Yes	Irface (B8)	No No No	Thin Mu Gauge o Other (E X X X	Depth (in Depth (in Depth (in Depth (in Depth (in	ata (D9) Remarks nches): _ nches): _ nches): _	.) 	Wetland Hydrology Present? <u>No</u>	







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## Feature ID: NWA002

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:	WETI Lake Ch	LAND DETER		ON DAT	A FORM · Mari		st Region Sampling Date:	10/18/2022
Applicant/Owner:		Lake Charlotte So	_ `		State:		Sampling Point	
Investigator(s):	ļ.	pryl Jennrich		Sect	ion, Townsh	ip, Range:	Se	c.7 T103N R30W
Landform (hillslope, terra	ice, etc.):	Swale		Local	relief (conca	ave, convex	, none):	Concave
Slope (%): 3	Lat:	43.74095		Long:	-94.47	255	Datum:	WGS84
Soil Map Unit Name:	Canisteo-G	ilencoe complex, (	) to 2 per	cent slopes	NV	VI Classifica	ation:	NA
Are climatic/hydrologic co	onditions of t	ne site typical for t	his time c	of the year?			ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantl	y disturbed?	Are "	normal circumst	ances present? No
Are vegetation	, soil	, or hydrology		naturally pr	oblematic?	(If ne	eded, explain a	any answers in remarks.)
SUMMARY OF FIN								
Hydrophytic Vegeta	tion Present	? No						
Hydric Soil Present	?	No		Is the s	ampled are	a within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes, c	ptional wetl	and site ID:		
Remarks:								
Recently harvested ag	gricultural fiel	d.						
VEGETATION Us	se scientifi	c names of pla	nts.					
		ŀ	bsolute	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	
4 5							t of Dominant Sp e OBL, FACW, or	
		_		=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:	)					lence Index Wo	
1							% Cover of:	Multiply by:
2 3							pecies / species	x 1 =
3 4							pecies	_ x 2 = x 3 =
5.							species	x 4 =
				=Total Cov	er		pecies	x 5 =
Herb Stratum	(Plot size:	)				Colum	n totals	(A) (B)
1.	-					Preva	lence Index = B	/A =
2.								
3						Hydro	ophytic Vegetat	ion Indicators:
-								/drophytic vegetation
							Dominance test	
							Prevalence inde	
7 8								daptations* (provide in Remarks or on a
9							separate sheet)	
10.								Irophytic vegetation*
-				=Total Cov	er		(explain)	
Woody Vine Stratum 1.	(Plot size:	)				*Indicato		nd wetland hydrology must be or problematic
2.				=Total Cov	er	Veg	Irophytic jetation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie			e sheet)			Pre	sent?	<u>No</u>

NWA003A

Depth <u>Matrix</u>			Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	;	Remarks
0-20	10YR 2/1	100	, ,				Clay		
			0.5%.5%	4	0	DI		e Orevel	Distinct on December of
20-28	2.5Y 4/2	99	2.5Y 5/4	1	С	PL	Sandy Clay Trac	e Gravel	Distinct or Prominent
*Type: C =	Concentration, D	= Deple	etion, RM = Redu	ced Mat	rix, MS =	Masked	Sand Grains.	**Location	n: PL = Pore Lining, M = Ma
	Indicators:		,						natic Hydric Soils*:
•	stosol (A1)		Sai	ndy Glev	ed Matrix	(S4)			ox (A16) (LRR K, L, R)
	stic Epipedon (A2)			ndy Redo		. ,			(LRR K, L)
	ack Histic (A3)			-	atrix (S6)			. ,	Aasses (F12) (LRR K, L, R)
	/drogen Sulfide (A	4)			ky Minera	al (F1)		-	<pre>surface (TF12)</pre>
	ratified Layers (A5			-	ed Matrix			explain in r	
	cm Muck (A10)	/			atrix (F3)	( ( <i>L</i> )		mpiani in i	omanoj
	epleted Below Darl	k Surfac			Surface	(F6)			
	iick Dark Surface (		· · · · · · · · · · · · · · · · · · ·		ark Surfac	` '			
									/tic vegetation and wetland
	andy Mucky Minera			Jox Depi	ressions (	FO)	problematic	ust be pre	sent, unless disturbed or
	cm Mucky Peat or		3)			1	•		
estrictive L	ayer (if observed.	l):							
/pe: Roc					-		Hydric So	il Present	? <u>No</u>
epth (inches	s): 28								
emarks:	·				-				
emarks:					-				
emarks: YDROLO									
emarks: YDROLO etland Hyc	Irology Indicators				<u>.</u>				
emarks: YDROLO etland Hyc	Irology Indicators ators (minimum of		equired; check a				Second		ors (minimum of two require
emarks: YDROLO /etland Hyc	Irology Indicators		equired; check a		<u>ply)</u> Fauna (B	:13)	Second		ors (minimum of two require
emarks: YDROLO letland Hyc rimary Indic Surfac	Irology Indicators ators (minimum of		equired; check a	Aquatic			<u>Second</u>	Surface S	
emarks: YDROLO etland Hyc imary Indic Surfac High V	Irology Indicators ators (minimum of e Water (A1)		required; check a	Aquatic True Aq	Fauna (B	nts (B14)		Surface S Drainage	oil Cracks (B6)
emarks: YDROLO etland Hyc imary Indic Surfac High V Satura	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		required; check a	Aquatic True Aq Hydroge	Fauna (B uatic Plar	nts (B14) Odor (C	1)	Surface S Drainage Dry-Sease	oil Cracks (B6) Patterns (B10)
emarks: YDROLO etland Hyc imary Indic Surfac High V Satura Water	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) ttion (A3)		required; check a	Aquatic True Aq Hydroge Oxidized Roots (0	Fauna (B uatic Plar en Sulfide d Rhizosp C3)	nts (B14) Odor (C oheres on	1) Living	Surface S Drainage Dry-Sease Crayfish E Saturation	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (
emarks: YDROLO etland Hyc imary Indic Surfac High V Satura Water Sedim Drift D	Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (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 oheres on uced Iron	1) Living (C4)	Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery ( r Stressed Plants (D1)
emarks: YDROLO Vetland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N	Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) ttion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)		required; check a	Aquatic True Aq Hydroge Oxidized Roots (0 Presenc Recent	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron	1) Living (C4)	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2)
emarks: YDROLO /etland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) ttion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	<u>one is i</u>		Aquatic True Aq Hydroge Oxidized Roots (0 Presend Recent (C6)	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in	1) Living (C4)	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery ( r Stressed Plants (D1)
emarks:  YDROLO  retland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) ttion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae	<u>one is i</u> rial Ima	  gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (0 Presend (C6) Thin Mu	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in <sup>-</sup>	1) Living (C4)	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2)
emarks: YDROLO /etland Hyc fimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con	one is i rial Ima cave Su	  gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (( Presence Recent (C6) Thin Mu Gauge (	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu nck Surfac or Well Da	nts (B14) Odor (C oheres on uced Iron uction in ce (C7) ata (D9)	1) I Living (C4) Tilled Soils _X	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2)
emarks:  YDROLO  /etland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) ttion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae	one is i rial Ima cave Su	  gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (( Presence Recent (C6) Thin Mu Gauge (	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in ce (C7) ata (D9)	1) I Living (C4) Tilled Soils _X	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl	oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2)
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emarks: YDROLO Tetland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water eld Observ urface Wate	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tition (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?	rial Ima cave Su 39) Yes	gery (B7) urface (B8)	Aquatic True Aq Hydroge Oxidizer Roots (C Presenc (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plan en Sulfide d Rhizosp C3) ce of Redu lron Redu ck Surfac or Well Da Explain in	nts (B14) Odor (C wheres or uced Iron uction in ce (C7) ata (D9) Remarks nches):	1) I Living (C4) Tilled Soils _X	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	toil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2) tral Test (D5)
emarks:  YDROLO  etland Hyc  fimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water eld Observ urface Wate	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tition (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 Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (( Presenc (C6) Thin Mu Gauge C Other (E X X	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu lron Redu ck Surfac or Well Da Explain in Depth (ii	nts (B14) Odor (C wheres on uced Iron uction in ce (C7) ata (D9) Remarks nches):	1) I Living (C4) Tilled Soils _X	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	toil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2) tral Test (D5)
emarks: YDROLO Yetland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water- ield Observ vurface Wate /ater Table I aturation Pr	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tition (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?	rial Ima cave Su 39) Yes	gery (B7) urface (B8)	Aquatic True Aq Hydroge Oxidizer Roots (C Presenc (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plan en Sulfide d Rhizosp C3) ce of Redu lron Redu ck Surfac or Well Da Explain in	nts (B14) Odor (C wheres on uced Iron uction in ce (C7) ata (D9) Remarks nches):	1) I Living (C4) Tilled Soils _X	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	ioil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery ( In Stressed Plants (D1) hic Position (D2) tral Test (D5)
emarks:  IYDROLO  /etland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water ield Observ urface Water /ater Table I aturation Pr ncludes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) ition (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? 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 uatic Plar en Sulfide d Rhizosp C3) ee of Redu lron Redu ck Surfac or Well Da Explain in Depth (in Depth (in	nts (B14) Odor (C oheres or uced Iron uction in <sup>-</sup> ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils X S)	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	toil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2) tral Test (D5)
emarks:  IYDROLO  /etland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water ield Observ urface Water /ater Table I aturation Pr ncludes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tition (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?	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 uatic Plar en Sulfide d Rhizosp C3) ee of Redu lron Redu ck Surfac or Well Da Explain in Depth (in Depth (in	nts (B14) Odor (C oheres or uced Iron uction in <sup>-</sup> ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils X S)	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	toil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2) tral Test (D5)
emarks:  YDROLO  /etland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water eld Observ urface Water /ater Table I aturation Pr ncludes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) ition (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? 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 uatic Plar en Sulfide d Rhizosp C3) ee of Redu lron Redu ck Surfac or Well Da Explain in Depth (in Depth (in	nts (B14) Odor (C oheres or uced Iron uction in <sup>-</sup> ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils X S)	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	toil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery ( r Stressed Plants (D1) hic Position (D2) tral Test (D5)
emarks:  IYDROLO  /etland Hyc rimary Indic Surfac High V Satura Water Sedim Drift D Algal N Iron D Inunda Sparse Water ield Observ urface Water /ater Table I aturation Pr ncludes cap	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) ition (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? 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 uatic Plar en Sulfide d Rhizosp C3) ee of Redu lron Redu ck Surfac or Well Da Explain in Depth (in Depth (in	nts (B14) Odor (C oheres or uced Iron uction in <sup>-</sup> ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils X S)	Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	toil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery ( In Stressed Plants (D1) hic Position (D2) tral Test (D5)







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Signature: CS

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## Feature ID: NWA003

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 DETE	RMINAT	ION DATA	FORM -	Midwest	t Region	
Project/Site:	Lake C	harlotte		/County:	Martir		Sampling Date:	10/19/2022
Applicant/Owner:		Lake Charlotte S	Solar, LLC		State:		Sampling Point:	NWA006A
Investigator(s):		Apryl Jennrich			n, Township	-	-	7 T103N R30W
Landform (hillslope, terr	. ,	Hillslo	ope		elief (concav		·	Concave
Slope (%): 15	Lat:	43.7374		Long:	-94.471		Datum:	WGS84
Soil Map Unit Name:		wanlake complex				l Classifica		NA
Are climatic/hydrologic					`		in in remarks)	
Are vegetation		, or hydrology		Significantly			ormal circumstan	·
Are vegetation	, soil	, or hydrology		naturally prol	olematic?	(If nee	eded, explain any	answers in remarks.)
SUMMARY OF FIN								
Hydrophytic Veget		t? Yes						
Hydric Soil Presen	it?	No		Is the sa	mpled area	within a v	wetland?	No
Wetland Hydrolog	y Present?	No		lf yes, op	tional wetla	nd site ID:		
Remarks:								
VEGETATION U	Jse scientif	ic names of p	ants.					
				Dominant	Indicator	Domin	ance Test Works	heet
Tree Stratum	(Plot size:	30)	% Cover	Species	Status	Number		·
1. Acer negundo			5	Y	FAC		r of Dominant Spec OBL, FACW, or F/	<b>a</b> ( <b>1</b> )
2.						Total N	umber of Dominant	
3							Across All Strata:	3(B)
4						Percent	of Dominant Spec	ies
5			<i>r</i>	Tatal Cause		that are	OBL, FACW, or FA	AC: <u>100%</u> (A/B)
Sapling/Shrub Stratum	n (Plot size:	: 15 )	5	_=Total Cover		Proval	ence Index Work	rshoot
1. Ribes cynosbati	<u> </u> (1 101 3126.	)	20	Y	FAC		6 Cover of:	Multiply by:
2. Fraxinus pennsylv	vanica		5	Y	FACW	OBL s		x 1 = 0
3.						-	·	x 2 = 10
4.						FAC s	pecies 25	x 3 = 75
5.						FACU	species 0	x 4 = 0
			25	=Total Cover		UPL sp	pecies 0	x 5 =0
Herb Stratum	(Plot size:	5)				Colum	n totals 30	(A) <u>85</u> (B)
1						Preval	ence Index = B/A	= 2.83
3							phytic Vegetation	
4 5.						_	Rapid test for hydr Dominance test is	ophytic vegetation
6							Prevalence index i	
7								ptations* (provide
8.							supporting data in	
9.							separate sheet)	
10.						F	Problematic hydro	phytic vegetation*
				=Total Cover		(	explain)	
Woody Vine Stratum 1.	(Plot size:	15 )					rs of hydric soil and v unless disturbed or p	wetland hydrology must be problematic
2						Hvd	rophytic	
				=Total Cover		Veg	etation	
						Pres	sent? Yes	<u>S</u>
Remarks: (Include phot	o numbers he	ere or on a separa	ate sheet)					
Wetland veg is approxir	nately 30 fee	t to the south Bar	e ground:	/0%				

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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
		,,,		,.				
<u>,</u>	Concentration, D	= Deple	tion, RM = Redu	ced Mat	rix, MS =	Masked S		on: PL = Pore Lining, M = Matrix
Hydric Soil								ematic Hydric Soils*:
His	stosol (A1)		Sai	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)
·	atified Layers (A5	,			ed Matrix	. ,	Other (explain in	
	m Muck (A10)				atrix (F3)	. ,		,
	pleted Below Darl	< Surfac	e (A11) Re	dox Dark	Surface	(F6)		
	ick Dark Surface (		· · · —		ark Surfac	. ,	*In dia tang af baadaan	
	ndy Mucky Minera	,			ressions (		, j j	nytic vegetation and wetland esent, unless disturbed or
	m Mucky Peat or				63310113 (	10)	problematic	
	in Mucky I eat of	i eat (O	5)					
Restrictive La	ayer (if observed	):						
Туре:					-		Hydric Soil Preser	t? <u>No</u>
Depth (inches	):				_			
	wetland based or	n slope.						
HYDROLO								
-	rology Indicators							
-	ators (minimum of	one is r	equired; check a					ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	513)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainag	e Patterns (B10)
Saturat	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presenc	e of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)
	lat or Crust (B4)				Iron Redu	uction in T		phic Position (D2)
Iron De	eposits (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	rface (B8)	Gauge of	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	3)	
Field Observ	ations:							
Surface Wate	r Present?	Yes	No	Х	Depth (ii	nches):		Alexad Ubudua I
Water Table F	Present?	Yes	No		Depth (ii	nches):	We	tland Hydrology Present?
Saturation Pre	esent?	Yes	No		Depth (ii	nches):		No No
(includes capi	llary fringe)		_					
Describe Reco	orded Data (strea	m gauge	e, monitoring wel	l, aerial p	photos, pr	evious in	spections), if available:	
Remarks:								



							•	4	40/40/2022
Project/Site: Applicant/Owner:	Lake Charl	otte ke Charlotte Solar	-	County:	Mart	IN MN	Sampling Da		10/19/2022
			, LLC	Castia	State:		Sampling Po		NWA008A
Investigator(s):		yl Jennrich			n, Townshi				3N R30W
Landform (hillslope, terrad	· · · —	Swale				ve, convex			
Slope (%): 2	Lat: _Coland clay lo	43.73834 pam, 0 to 2 percent		Long:	-94.46	817	Datum:	1	NGS84
Soil Map Unit Name:	flooded		it slopes	s, nequentity	NW	/I Classifica	ation:		NA
Are climatic/hydrologic co	nditions of the	site typical for this	time of	the year?	Yes	(If no, expla	ain in remarks	6)	
Are vegetation X	, soil ,	, or hydrology	5	Significantly	disturbed?	Are "	normal circum	nstances p	oresent? No
Are vegetation	, soil ,	, or hydrology	r	naturally prob	olematic?	(If ne	eded, explai	n any ans	wers in remarks.)
SUMMARY OF FINE	DINGS								
Hydrophytic Vegetat	ion Present?	No							
Hydric Soil Present?	1	No		Is the sa	mpled are	a within a	wetland?		No
Wetland Hydrology		No			-	and site ID:			
Remarks:									
Recently tilled agricultur		, ,		ıl field.					
VEGETATION Us	e scientific n	•		Dominant	Indicator	Domir	nance Test W	/orkshoot	
Tree Stratum (P	lot size:			Species	Status	Domin	lance lest w	orksneet	i
1		) ////		Opecies	Status		er of Dominant e OBL, FACW,		(A)
2 3							lumber of Dom s Across All St		(B)
4 5							t of Dominant OBL, FACW,		% (A/B)
			=	=Total Cover			, ,		` ` `
Sapling/Shrub Stratum	(Plot size:	)				Preva	lence Index	Workshee	et
1						Total	% Cover of:	Μ	lultiply by:
2						OBL s	pecies	x 1 =	:
3						FACV	/ species	x 2 =	:
4							pecies	x 3 =	·
5							species	x 4 =	:
			=	=Total Cover			pecies	x 5 =	
Herb Stratum	(Plot size:	)					nn totals	(A)	(B)
1						Preva	lence Index =	: B/A =	
2						Lluder	whytie Vere	tation Ind	licotoro
3 4							phytic Vege Rapid test for		tic vegetation
 5							Dominance te		
6.							Prevalence in		
7.						_	Morphologica		
8.							supporting da		
9.							separate she	et)	
10.							Problematic h	nydrophyti	c vegetation*
			=	=Total Cover			(explain)		
Woody Vine Stratum	(Plot size:	)					ors of hydric soil unless disturbe		nd hydrology must be matic
0				=Total Cover			Irophytic letation		
							sent?	No	
Remarks: (Include photo	numbers here o	or on a separate s	heet)						
Recently tilled agricultural	field. Vegetatio	on on edge of field	d is bron	ne. Bare gro	und: 100%				

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Depth								
Depth <u>Matrix</u>			Redox Fea	tures				
(Inches)	Color (moist)	%	Color (moist	) %	Type*	Loc**	Texture	Remarks
0-11	10YR 2/1	100					Clay Loam	
11-13	10YR 2/1	95	10YR 3/3	5	С	PL	Clay	Distinct or Prominent
13-16	10YR 3/2	100					Clay Loam	
							,	
*Type: C =	Concentration, D	= Deple	tion RM = Re	duced Mat	rix MS =	Masked S	Sand Grains **Loc	ation: PL = Pore Lining, M = Matrix
Hydric Soil		- Depie			ΠΛ, IVIO –	iviaskeu v		blematic Hydric Soils*:
•	stosol (A1)		(	Sandy Gley	od Matrix	(\$4)		Redox (A16) (LRR K, L, R)
	stic Epipedon (A2)			Sandy Red		(04)		(S7) (LRR K, L)
	ack Histic (A3)			Stripped Ma				ese Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	4)		Loamy Muc	. ,	J (⊑1)		Dark Surface (TF12)
	ratified Layers (A5			Loamy Gley			Other (explain	
	cm Muck (A10)	)		Depleted M		( ( Z)		
	pleted Below Darl	k Surfac		Redox Dark		(F6)		
	ick Dark Surface (		· · · <u> </u>	Depleted D		. ,		
	indy Mucky Minera	,		Redox Dep		· · /		ophytic vegetation and wetland present, unless disturbed or
	cm Mucky Peat or	• •		Vedox Deb	165510115 (	(FO)	problematic	present, unless disturbed of
	-		5)			1	-	
	ayer (if observed	l):						
Type:					-		Hydric Soil Pres	sent? <u>No</u>
Depth (inches	s):				_			
Remarks:								
Soil is extrem	nely compacted.							
Soil is extrem	nely compacted.							
Soil is extrem								
HYDROLO Wetland Hyd	GY Irology Indicators							
HYDROLO Wetland Hydr Primary Indica	GY rology Indicators ators (minimum of		equired; chec					licators (minimum of two required)
HYDROLO Wetland Hydr Primary Indica	GY Irology Indicators		equired; chec		o <u>ply)</u> Fauna (B	113)		<u>dicators (minimum of two required)</u> ce Soil Cracks (B6)
HYDROLO Wetland Hyd Primary Indica Surface	GY rology Indicators ators (minimum of		equired; chec	Aquatic		,	Surfa	
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat	GY irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		equired; chec 	Aquatic True Ac	Fauna (B quatic Plai en Sulfide	nts (B14) Odor (C	Surfa Drain 1) Dry-S	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat Water	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired; chec 	Aquatic True Ac Hydrog Oxidize	Fauna (B quatic Plai en Sulfide d Rhizosp	nts (B14) Odor (C	Surfa Drain 1) Dry-S Living Crayf	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; chec 	Aquatic True Ac Hydrog Oxidize Roots (	Fauna (B quatic Plar en Sulfide d Rhizosp C3)	nts (B14) Odor (C oheres on	Surfa Drain 1)Dry-S LLivingCrayf Satur	ce Soil Cracks (B6) age Patterns (B10) leason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		equired; chec 	Aquatic True Ac Hydrog Oxidize Roots ( Presen	Fauna (B quatic Plai en Sulfide d Rhizosp C3) ce of Redi	nts (B14) Odor (C oheres on uced Iron	Surfa Drain 1) Dry-S Living Crayf Satur (C4) Stunt	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1)
HYDROLOO Wetland Hyd Primary Indica Surface High W Satural Water I Sedime Drift De Algal M	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4)		equired; chec 	Aquatic True Ac Hydrog Oxidize Roots ( Present Recent	Fauna (B quatic Plai en Sulfide d Rhizosp C3) ce of Redi	nts (B14) Odor (C oheres on uced Iron	Surfa Surfa Drain 1) Dry-S Living Crayf Satur (C4) Stunt Filled Soils X Geon	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De	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 Ac Hydrog Oxidize Roots ( Present Recent (C6)	Fauna (B quatic Plai en Sulfide d Rhizosp C3) ce of Redi Iron Redi	nts (B14) Odor (C oheres on uced Iron uction in T	Surfa Surfa Drain 1) Dry-S Living Crayf Satur (C4) Stunt Filled Soils X Geon	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1)
HYDROLOO Wetland Hyd Primary Indica Surfaca High W Saturat Water I Sedime Drift De Algal M Iron De Inunda	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>one is r</u> rial Imaç	  jery (B7)	Aquatic True Ac Hydrog Oxidize Roots ( Presend Recent (C6) Thin Mu	Fauna (B quatic Plai en Sulfide d Rhizosp C3) C3 Iron Redu uck Surfac	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Surfa Surfa Drain 1) Dry-S Living Crayf Satur (C4) Stunt Filled Soils X Geon	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse	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 ely Vegetated Con	one is r rial Imag cave Su	  jery (B7)	Aquatic True Ac Hydrog Oxidize Roots ( Presend Recent (C6) Thin Mu Gauge	Fauna (B quatic Plan 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)	Surfa Drain 1) Dry-S Living Crayf (C4) Stunt Filled Soils X Geon FAC-	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse	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	one is r rial Imag cave Su	  jery (B7)	Aquatic True Ac Hydrog Oxidize Roots ( Presend Recent (C6) Thin Mu Gauge	Fauna (B quatic Plai en Sulfide d Rhizosp C3) C3 Iron Redu uck Surfac	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Surfa Drain 1) Dry-S Living Crayf (C4) Stunt Filled Soils X Geon FAC-	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Orift De Algal M Iron De Inunda Sparse Water-	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 ely Vegetated Con Stained Leaves (B rations:	one is r rial Imag cave Su 39)	gery (B7)  	Aquatic True Ac Hydrog Oxidize Roots ( Present (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plan 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	Surfa Drain 1) Dry-S Living Crayf (C4) Stunt Filled Soils X Geon FAC-	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate	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 ely Vegetated Con Stained Leaves (E ations: r Present?	rial Imag cave Su 39) Yes	gery (B7) urface (B8) 	Aquatic True Ac Hydrog Oxidize Roots ( Presend Recent (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plai 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):	Surfa Surfa Drain Dry-S Living Crayf (C4) Stunt Filled Soils X Geon FAC- S)	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Surface Wate Water Table F	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 ely Vegetated Con Stained Leaves (E rations: r Present? Present?	rial Imag cave Su 39) Yes Yes	gery (B7)  	Aquatic True Ac Hydrog Oxidize Roots ( Presend Recent (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plai 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 1 ce (C7) ata (D9) Remarks nches):	Surfa Surfa Drain Dry-S Living Crayf (C4) Stunt Filled Soils X Geon FAC- S)	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Wetland Hydrology Present?
HYDROLOO Wetland Hyd Primary Indica Surfaca High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre	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 ely Vegetated Con Stained Leaves (E rations: ar Present? Present?	rial Imag cave Su 39) Yes	gery (B7) urface (B8) 	Aquatic True Ac Hydrog Oxidize Roots ( Presend Recent (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plai 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 1 ce (C7) ata (D9) Remarks nches):	Surfa Surfa Drain Dry-S Living Crayf (C4) Stunt Filled Soils X Geon FAC- S)	ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ. Surface Wate Water Table F Saturation Pre (includes capi	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 Aele ely Vegetated Con Stained Leaves (E rations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)  	Aquatic True Ac Hydrog Oxidize Roots ( Presend (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plan en Sulfide d Rhizosp C3) ce of 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):	Surfa Drain Drain Dry-S Living Crayf Satur (C4) Stunt Filled Soils X Geon FAC- S)	ce Soil Cracks (B6) age Patterns (B10) beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Wetland Hydrology Present?
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ. Surface Wate Water Table F Saturation Pre (includes capi	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 Aele ely Vegetated Con Stained Leaves (E rations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)  	Aquatic True Ac Hydrog Oxidize Roots ( Presend (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plan en Sulfide d Rhizosp C3) ce of 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):	Surfa Surfa Drain Dry-S Living Crayf (C4) Stunt Filled Soils X Geon FAC- S)	ce Soil Cracks (B6) age Patterns (B10) beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Wetland Hydrology Present?
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ. Surface Wate Water Table F Saturation Pre (includes capi	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 Aele ely Vegetated Con Stained Leaves (E rations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)  	Aquatic True Ac Hydrog Oxidize Roots ( Presend (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plan en Sulfide d Rhizosp C3) ce of 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):	Surfa Drain Drain Dry-S Living Crayf Satur (C4) Stunt Filled Soils X Geon FAC- S)	ce Soil Cracks (B6) age Patterns (B10) beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Wetland Hydrology Present?
HYDROLOO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ. Surface Wate Water Table F Saturation Pre (includes capi	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 Aele ely Vegetated Con Stained Leaves (E rations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)  	Aquatic True Ac Hydrog Oxidize Roots ( Presend (C6) Thin Mu Gauge Other (I	Fauna (B quatic Plan en Sulfide d Rhizosp C3) ce of 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):	Surfa Drain Drain Dry-S Living Crayf Satur (C4) Stunt Filled Soils X Geon FAC- S)	ce Soil Cracks (B6) age Patterns (B10) beason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Wetland Hydrology Present?













-2952

-EEEG

EFEG

1138

1140

1142

JEAN

9140



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: NWA008

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**

		AND DETER	RMINATI	ON DATA	FORM -	Midwes	-			
Project/Site:	Lake Cha			County:	Martin		Sampling D	-	10/19/2	
Applicant/Owner:		_ake Charlotte S	olar, LLC			MN	Sampling P	-	NWA0	
nvestigator(s):		pryl Jennrich			n, Township	-		Sec.8 T10		N
Landform (hillslope, terrad	· / _	Depres	sion		lief (concav				Concave	
Slope (%): 1	Lat:	43.73765		Long:	-94.466	93	Datum:		WGS84	
Soil Map Unit Name:	flooded	loam, 0 to 2 per	cent slope	s, frequently	NWI	Classific	ation:		NA	
Are climatic/hydrologic co	onditions of th	e site typical for	this time c	of the year?	Yes (I	f no, expl	ain in remarl	ks)		
Are vegetation X	, soil	, or hydrology		Significantly of	disturbed?	Are "	normal circu	imstances	present?	No
Are vegetation	, soil	, or hydrology		naturally prob	lematic?	(lf ne	eded, expla	ain any an	swers in	remarks.)
SUMMARY OF FINI	DINGS									
Hydrophytic Vegetat	tion Present?	No								
Hydric Soil Present?	)	No		Is the sa	npled area	within a	wetland?		No	
Wetland Hydrology	Present?	No		If yes, opt	ional wetlar	nd site ID:	:			-
Remarks:										_
Recently tilled agricultu		-		al field.						
VEGETATION Us	e scientific	; names of pla								
Tree Christian (C		,		Dominant	Indicator	Domii	nance Test	Workshee	t	
<u>Tree Stratum</u> (F	Plot size:	)	% Cover	Species	Status		er of Dominar e OBL, FACV		0	(A)
2 3							Number of Do		0	(B)
4 5							nt of Dominar e OBL, FACV		%	(A/B)
		-		=Total Cover						
Sapling/Shrub Stratum	(Plot size:	)					alence Index			
1							% Cover of:		/lultiply by	•
2 3							species V species		=	
4							species	x 2 =		
5.							J species	x 4 =	-	
				=Total Cover			species	x 5 :		
Herb Stratum	(Plot size:	)					nn totals	(A)		(B)
1.	· –					Preva	lence Index	= B/A =		
2.										
3.						Hydro	ophytic Veg	etation Ind	dicators:	
4.							Rapid test for	or hydrophy	tic veget/	tation
5							Dominance			
6							Prevalence			
7							Morphologic			
8 9.						-	supporting of separate sh		Idiks of (	ла
10							Problematic	,	ic veneta	tion*
				=Total Cover		-	(explain)	, ai opinyt		
Woody Vine Stratum	(Plot size:	)				*Indicate	ors of hydric so unless disturb			ogy must be
1 2				=Total Cover		– Hyo Veg	drophytic getation sent?	<u>No</u>		
Remarks: (Include photo Recently tilled agricultura			,	orn does not s	seem like it	was stres	sed. Bare gi	ound: 100	%	

NWA009A

Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Muck	3/2       100         3/2       98       2.         5/6       98       7.5         3/2       100       100         3/2       100       100         3/2       100       100         3/2       100       100         ation, D = Depletion, F       100         ation, D = Depletion, F       100         S:       100         Idide (A4)       100         vers (A5)       100         A10)       000 Dark Surface (A11)         urface (A12)       100         y Mineral (S1)       100         Peat or Peat (S3)       100	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	C C C Matrix, MS = M Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( Gleyed Matrix (F3) Dark Surface (F d Dark Surface	lasked Sand G Ind S4) (F1) (F2)	licators for Problema Coast Prairie Redox Dark Surface (S7) (L	(A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
0-10         10Y           10-18         10Y           18-21         2.5°           21-22         2.5°           *Type: C = Concent           Hydric Soil Indicato           Histosol (A1           Histic Epipe           Black Histic           Hydrogen S           Stratified La           2 cm Muck           Depleted Be           Thick Dark           Sandy Mucl           5 cm Mucky           estrictive Layer (if comparison)           (pe:	3/2       100         3/2       98       2.         5/6       98       7.5         3/2       100       100         3/2       100       100         3/2       100       100         3/2       100       100         ation, D = Depletion, F       100         ation, D = Depletion, F       100         S:       100         Idide (A4)       100         vers (A5)       100         A10)       000 Dark Surface (A11)         urface (A12)       100         y Mineral (S1)       100         Peat or Peat (S3)       100	5Y 5/6         2           5YR 4/6         2           5YR 4/6         2           5YR 4/6         2           SYR 4/6         2           Syn 4/6         2           Sandy 6         Sandy 7           Stripped         Loamy 8           Loamy 0         Depleted           N         Redox 6           Depleted         Depleted	C C C C Matrix, MS = M Matrix, MS = M Sleyed Matrix (S Matrix (S6) Mucky Mineral (S Sleyed Matrix (G Gleyed Matrix (F3) Dark Surface (F d Dark Surface	PL Clay	Clay Loam Clay L	Distinct or Prominent PL = Pore Lining, M = Ma <b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) .RR K, L) Surface (TF12)		
18-21         2.5'           21-22         2.5'           *Type: C = Concent           Hydric Soil Indicato           Histosol (A1           Histic Epipe           Black Histic           Hydrogen S           Stratified La           2 cm Muck           Depleted Ba           Thick Dark           Sandy Mucl           5 cm Mucky           estrictive Layer (if competence):	5/6 98 7.5 3/2 100 3/2 100 ation, D = Depletion, F s: lon (A2) (A3) Ilfide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	SYR 4/6         2           SYR 4/6         2           SYR 4/6         2           Syr 4/6         2           RM = Reduced I         1           Sandy G         Sandy G           Sandy R         1           Loamy N         1           Loamy C         1           Redox E         1           Depleted         1	C Matrix, MS = M Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( Gleyed Matrix (F3) Dark Surface (F d Dark Surface	PL Clay	Clay Loam Clay Loam Grains. **Location: F licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	Distinct or Prominent PL = Pore Lining, M = Ma <b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) .RR K, L) Surface (TF12)		
18-21         2.5'           21-22         2.5'           *Type: C = Concent           Histosol (A1           Histic Epipe           Black Histic           Hydrogen S           Stratified La           2 cm Muck           Depleted Ba           Thick Dark           Sandy Mucl           5 cm Mucky           estrictive Layer (if competing the second sec	5/6 98 7.5 3/2 100 3/2 100 ation, D = Depletion, F s: lon (A2) (A3) Ilfide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	SYR 4/6         2           SYR 4/6         2           SYR 4/6         2           Syr 4/6         2           RM = Reduced I         1           Sandy G         Sandy G           Sandy R         1           Loamy N         1           Loamy C         1           Redox E         1           Depleted         1	C Matrix, MS = M Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( Gleyed Matrix (F3) Dark Surface (F d Dark Surface	PL Clay	Clay Loam Clay Loam Grains. **Location: F licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	Distinct or Prominent PL = Pore Lining, M = Ma <b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) .RR K, L) Surface (TF12)		
21-22 2.5 *Type: C = Concent Histosol (Ar Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if contents):	3/2 100 3/2 100 ation, D = Depletion, F ation, D = Depletion, F s: lon (A2) (A3) lifide (A4) vers (A5) A10) ow Dark Surface (A11) urface (A12) y Mineral (S1) Peat or Peat (S3)	RM = Reduced N Sandy G Sandy R Stripped Loamy N Loamy C Depleted 1)Redox D	Matrix, MS = M Matrix, MS = M Sleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( Gleyed Matrix (F3) Dark Surface (F d Dark Surface	lasked Sand G Ind S4) (F1) (F2)	Clay Loam Clay Loam Crains. **Location: F Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	PL = Pore Lining, M = Ma <b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
*Type: C = Concent Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Ba Thick Dark Sandy Muck 5 cm Mucky estrictive Layer (if c //pe: epth (inches):	ation, D = Depletion, F ation, D = Depletion, F 3: lon (A2) (A3) lifide (A4) vers (A5) A10) ow Dark Surface (A11) urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	Grains. **Location: F licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	<b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe: epth (inches):	s: A3) Iffide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	<b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe: epth (inches):	s: A3) Iffide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	<b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c ype:	s: A3) Iffide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	<b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c ype:	s: A3) Iffide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	<b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c ype:	s: A3) Iffide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	<b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Hydric Soil Indicato Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe: epth (inches):	s: A3) Iffide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy G Sandy R Stripped Loamy N Loamy C Depleted	Gleyed Matrix (S Redox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	licators for Problema Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	<b>tic Hydric Soils*:</b> (A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Histosol (A1 Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe:	lon (A2) (A3) Ilfide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy R Stripped Loamy N Loamy O Depleted	edox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	S4) (F1) (F2)	Coast Prairie Redox Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	(A16) (LRR K, L, R) .RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Histic Epipe Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe:	lon (A2) (A3) Ilfide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Sandy R Stripped Loamy N Loamy O Depleted	edox (S5) Matrix (S6) Mucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F1)	Dark Surface (S7) (L Iron-Manganese Mas Very Shallow Dark S	.RR K, L) sses (F12) (LRR K, L, R) Surface (TF12)		
Black Histic Hydrogen S Stratified La 2 cm Muck Depleted Ba Thick Dark Sandy Muck 5 cm Mucky estrictive Layer (if c /pe: epth (inches):	A3) Ilfide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Stripped Loamy N Loamy O Depleted	Matrix (S6) Aucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F2)	Iron-Manganese Mas Very Shallow Dark S	sses (F12) (LRR K, L, R) Surface (TF12)		
Hydrogen S Stratified La 2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe:	Ifide (A4) vers (A5) A10) ow Dark Surface (A11 urface (A12) v Mineral (S1) Peat or Peat (S3)	Loamy N Loamy C Depleted Redox D	Aucky Mineral ( Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F2)	Very Shallow Dark S	Surface (TF12)		
Stratified La 2 cm Muck Depleted Ba Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe: epth (inches):	vers (A5) A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Loamy C Depleted ) Redox D Depleted	Gleyed Matrix ( d Matrix (F3) Dark Surface (F d Dark Surface	(F2)	-			
2 cm Muck Depleted Be Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe:	A10) ow Dark Surface (A11 urface (A12) y Mineral (S1) Peat or Peat (S3)	Depleted Depleted Redox D Depleted	d Matrix (F3) Dark Surface (F d Dark Surface		Other (explain in rem	narks)		
Depleted Bo Thick Dark Sandy Muck 5 cm Mucky estrictive Layer (if c ype: epth (inches):	ow Dark Surface (A11 urface (A12) / Mineral (S1) Peat or Peat (S3)	I) Redox D Depleted	Dark Surface (F d Dark Surface	-6)				
Thick Dark Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe: epth (inches):	urface (A12) / Mineral (S1) Peat or Peat (S3)	Depleted	d Dark Surface	-6)				
Sandy Mucl 5 cm Mucky estrictive Layer (if c /pe: epth (inches):	y Mineral (S1) Peat or Peat (S3)	·		·				
5 cm Mucky estrictive Layer (if c ype: epth (inches):	Peat or Peat (S3)	Redox D		· · · · · · · · · · · · · · · · · · ·		vegetation and wetland		
estrictive Layer (if c ype: epth (inches):			Depressions (F8		drology must be preser	nt, unless disturbed or		
ype: epth (inches):	oserved):			pre				
epth (inches):								
				н	lydric Soil Present?	No		
emarks:								
	mum of one is require					s (minimum of two require		
Surface Water (	.1)	Aqua	atic Fauna (B13	3)	Surface Soil	Cracks (B6)		
High Water Tab	∋ (A2)		Aquatic Plants	· ,				
Saturation (A3)			rogen Sulfide C	. ,				
Water Marks (B	,		lized Rhizosph	eres on Living		( )		
Sediment Depo			ts (C3)			(isible on Aerial Imagery (		
Drift Deposits (E Algal Mat or Cru	,		ence of Reduc	( )		Stressed Plants (D1)		
Iron Deposits (E	ы (D4)				FAC-Neutral			
		(C6)	Muck Surface	(C7)		11031 (00)		
	5)	(C6) (C6) Thin		( )				
Sparsely Vegeta	5) e on Aerial Imagery (B	37) Thin		a (D9)				
	5) e on Aerial Imagery (E ted Concave Surface (	87) Thin (B8) Gau	ge or Well Data					
Water-Stained L	5) e on Aerial Imagery (E ted Concave Surface (	87) Thin (B8) Gau						
Water-Stained L	5) e on Aerial Imagery (E eed Concave Surface ( eaves (B9)	37) Thin (B8) Gau Othe	ge or Well Data er (Explain in R	Remarks)				
Water-Stained L ield Observations: urface Water Present	5) e on Aerial Imagery (E eed Concave Surface ( eaves (B9)	37) Thin (B8) Gau Othe NoX	ge or Well Data er (Explain in R Depth (inc	Remarks) ches):		nd Hydrology		
Water-Stained I ield Observations: urface Water Present /ater Table Present?	5) e on Aerial Imagery (E ed Concave Surface ( eaves (B9) Yes	37) Thin (B8) Gau Othe NoX	ge or Well Data er (Explain in R Depth (inc	temarks) ches): ches):		nd Hydrology Present?		
	5) e on Aerial Imagery (E ead Concave Surface ( eaves (B9) Yes Yes Yes	37) Thin (B8) Gau Othe NoX	ge or Well Data er (Explain in R Depth (inc Depth (inc	temarks) ches): ches):		resent?		





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: NWA009

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	MINAT	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Ch	arlotte	City/	County:	Martin	า	Sampling [	Date:	10/19/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling F	oint:	NWA010A
Investigator(s):	1	Apryl Jennrich		Section	on, Townshi	o, Range:		Sec.8 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Depress	sion	Local r	elief (concav	/e, conve>	k, none):		Concave
Slope (%): 1	Lat:	43.73572		Long:	-94.467	'19	Datum:		WGS84
Soil Map Unit Name:	Webster cl	ay loam, 0 to 2 pe	ercent slop	es	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, expl	ain in remar	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expl	ain any ar	swers in remarks.)
SUMMARY OF FINE	DINGS								
Hydrophytic Vegetat	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	within a	wetland?		No
Wetland Hydrology F	Present?	No		If yes, op	otional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultur			0	al field.					
VEGETATION Use	e scientifi	•		<u> </u>		·			
Tree Stratum (P		λ.		Dominant Species	Indicator	Domi	nance Test	worksnee	et
1(P	lot size:	)	% Cover	Species	Status		er of Domina e OBL, FAC		(A)
2 3.							Number of Do		0 (B)
4 5							nt of Domina e OBL, FAC		% (A/B)
				=Total Cove	r	that ar	e obl, i Ao	N, 011 AO.	()
Sapling/Shrub Stratum	(Plot size:	)				Preva	alence Inde	x Worksho	et
1.						Total	% Cover of:		Multiply 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	llence Index	= B/A = _	
						Lludr	anhytia Vac	etation In	diastora
3 4.						-	ophytic Veo Rapid test f		vtic vegetation
5							Dominance	• •	
6.							Prevalence	index is ≤	3.0*
7.							Morphologi	cal adapta	ions* (provide
8.							supporting	data in Rei	marks or on a
9							separate sh	eet)	
10							Problematio	hydrophy	tic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.		)					ors of hydric s unless distur		and hydrology must be ematic
2		-		=Total Cove	r	Veç	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWA010A

Depth <u>Matrix</u>				Redox	Feat	tures						
(Inches)	Color (moist)	%	Color (moi	st)	%	Type*	Loc**	Text	ture	Remarks		
0-19	10YR 2/1	100						Lo	am			
19-21	10YR 2/2	100						Clav	Loam			
			0 EV 4/2		10	D						
21-27	2.5Y 3/3	90	2.5Y 4/3		10	D	М		Trace Gravel			
*Type: C =	Concentration, D	= Denle	tion RM = F	educer	Mati	rix MS =	Masked S	Sand Grains	**Locatio	L on: PL = Pore Lining, M = Ma		
	Indicators:	- Depie	, ion, i (iii – ii	leuuceu	iviati	IX, 1010 -	Maskeu			ematic Hydric Soils*:		
-	stosol (A1)			Sandv	Glev	ed Matrix	(S4)			dox (A16) (LRR K, L, R)		
	stic Epipedon (A2)			Sandy	-		()			7) (LRR K, L)		
	ack Histic (A3)			-		atrix (S6)				Masses (F12) (LRR K, L, R)		
	drogen Sulfide (A	4)				ky Minera	l (F1)		-	rk Surface (TF12)		
	atified Layers (A5			-		ed Matrix			er (explain in			
	m Muck (A10)	,		-	-	atrix (F3)	. /		<b>V 1</b> ··· ···	,		
	pleted Below Darl	k Surfac	e (A11)	-		Surface	(F6)					
	ick Dark Surface (		. ,	Deplet	ed Da	ark Surfac	e (F7)	*Indicato	re of hydroph	nytic vegetation and wetland		
	ndy Mucky Minera	. ,		-		essions (				esent, unless disturbed or		
	m Mucky Peat or		3)	-	- 1	(	- /	problema		,		
ostrictivo I	ayer (if observed	N-										
	ayer (il observed	·)·										
vne:								Hydric	Soil Presen	t? No		
epth (inches	):					-		Hydric	Soil Presen	t? <u>No</u>		
epth (inches emarks:	GY					-		Hydric	Soil Presen	t? <u>No</u>		
epth (inches emarks: YDROLO	GY rology Indicators		required: che	ck all th		- -						
epth (inches emarks: IYDROLO /etland Hyd rimary Indica	GY rology Indicators ators (minimum of		equired; che				13)		ondary Indica	ntors (minimum of two require		
epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surfac	GY rology Indicators ators (minimum of e Water (A1)		equired; che	Aq	uatic	Fauna (B			ondary Indica	ttors (minimum of two required) Soil Cracks (B6)		
epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surfac High W	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2)		equired; che	Aq Tru	uatic ue Aq	Fauna (B uatic Plar	nts (B14)	Secc	ondary Indica Surface	<u>ators (minimum of two require</u> Soil Cracks (B6) ∋ Patterns (B10)		
epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surfac High W Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)		equired; che	Aq Tru Hy	uatic ue Aq droge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	<u>Secc</u> 1)	ondary Indica Surface	ttors (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2)		
epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surfac High W Satura Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		equired; che	Aq Tru Hy Ox	uatic ue Aq droge idizeo	Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	<u>Secc</u> 1)	ondary Indica Surface Drainage Dry-Sea Crayfish	tors (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)		
epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surface High W Satura Water Sedime	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)		equired; che	Aq Tru Hy Ox Ro	uatic ue Aq droge idized ots (0	Fauna (B uatic Plar en Sulfide d Rhizosp C3)	nts (B14) Odor (C heres on	Secc 1) Living	ondary Indica Surface Drainage Dry-Seas Crayfish Saturatio	ttors (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery		
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akeCharl FEIGHT 2 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







BEES.



### Feature ID: NWA010

- 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



## **TETRA TECH**

# **Aerial Photograph Review** Lake Charlotte Solar Martin County, Minnesota

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	st Region	1	
Project/Site:	Lake Ch	arlotte	City/	County:	Martin	n	Sampling I	Date:	10/19/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling F	Point:	NWA011A
Investigator(s):	A	Apryl Jennrich		Secti	on, Townshi	p, Range:		Sec.8 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Depress	sion	Local r	elief (concav	ve, conve	k, none):		Concave
Slope (%): 1	Lat:	43.73523		Long:	-94.467	'03	Datum:		WGS84
Soil Map Unit Name:	Webster cla	ay loam, 0 to 2 pe	ercent slop	bes	NW	I Classific	ation:		NA
Are climatic/hydrologic co	nditions of t	ne site typical for	this time c	of the year?	Yes (	If no, expl	ain in remai	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 ai	nswers in remarks.)
SUMMARY OF FINE	DINGS								
Hydrophytic Vegetati	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	a within a	wetland?		No
Wetland Hydrology F	Present?	Yes		lf yes, o	otional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultur			0	ral field.					
VEGETATION Use	e scientific			Developed	Le d'anten	Dent		<b>14</b> /1 - 1 - 1	- 4
Tree Stratum (P		λ.		Dominant Species	Indicator	Domi	nance Test	worksne	et
1.	lot size:	)	% Cover	Species	Status		er of Domina e OBL, FAC		0 (A)
							lumber of De		(P)
3 4							es Across All		(B)
5.							nt of Domina e OBL, FAC		<u>%</u> (A/B)
		-		=Total Cove	er				
Sapling/Shrub Stratum	(Plot size:	)					alence Inde		
1							% Cover of		Multiply by:
2 3							species V species	x 1 x 2	
3 4							species		
5.							J species		=
				=Total Cove	er		species	x 5	
Herb Stratum	(Plot size:	)				Colun	nn totals	(A	.) (B)
1.	-					Preva	lence Index	c = B/A =	· · · ·
2.								-	
3.						Hydro	ophytic Ve	getation Ir	ndicators:
4.							Rapid test f	for hydropl	nytic vegetation
5							Dominance		
-						_	Prevalence		
7									tions* (provide
8 9.							supporting separate sh		marks or on a
9 10.							•	,	rtic vegetation*
10				=Total Cove	r		(explain)	o ny aropiny	lo vogotalon
Woody Vine Stratum 1.	-	)				*Indicate	,		and hydrology must be lematic
2		-		=Total Cove	r	Veç	drophytic getation esent?	No	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWA011A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth	Depth <u>Matrix</u>				tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-4	10YR 2/1	100					Loam			
4-6	10YR 2/1	97	7.5YR 4/4	3	С	PL	Clay	Distinct or Prominent		
6-14	10YR 2/1	100					Loam			
14-21	10YR 2/2	100					Loam			
				40						
21-23	10YR 2/2	90	2.5Y 4/3	10	D	М	Loam			
23-25	2.5Y 4/3	100					Sandy Loam			
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mat	rix, MS =	Masked \$	Sand Grains. **Locatio	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils*:		
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Ree	dox (A16) (LRR K, L, R)		
His	stic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S7	') (LRR K, L)		
Bla	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)	~ <i>(</i>	`		atrix (F3)	(50)				
	pleted Below Darl		· · ·		Surface	· · /				
	ick Dark Surface (		`		ark Surfac	. ,		nytic vegetation and wetland esent, unless disturbed or		
	ndy Mucky Minera m Mucky Peat or			uox Depi	ressions (	го)	problematic	esent, unless disturbed of		
	-		0)							
	ayer (if observed	):					Undria Cail Drasan	40 N-		
Type: Depth (inches	.).				-		Hydric Soil Presen	t? <u>No</u>		
Deptil (menes					-					
Remarks:										
	<u></u>									
HYDROLO										
-	rology Indicators		anuirad, abaal, a	ll that an	a huì		Cocondom Indico	tors (minimum of two required)		
	ators (minimum of	one is r	equired; check a			10)		tors (minimum of two required)		
	e Water (A1)				Fauna (B	,		Soil Cracks (B6)		
°	/ater Table (A2) tion (A3)				uatic Plar en Sulfide	` '		e Patterns (B10)		
	Marks (B1)				d Rhizosp	•				
	ent Deposits (B2)			Roots (	•		· _ /	on Visible on Aerial Imagery (C9)		
	eposits (B3)				ce of Redu	uced Iron		or Stressed Plants (D1)		
Algal N	lat or Crust (B4)			Recent	Iron Redu	iction in T	Filled Soils X Geomor	phic Position (D2)		
Iron De	eposits (B5)		X	(C6)			FAC-Neu	utral Test (D5)		
	tion Visible on Ae				ick Surfac	. ,				
·	ly Vegetated Con		Irface (B8)	-	or Well Da		、 、			
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	s)			
Field Observ		Va-	N1 -	V	Derth "	h \				
Surface Wate		Yes	No No	X X	Depth (in	· · -	We	tland Hydrology		
Water Table F Saturation Pre		Yes Yes	No	×	Depth (in Depth (in	· · -		Present? Yes		
(includes capi		. 00		~						
· ·		m gauge	e, monitoring wel	l, aerial p	photos, pr	evious in	spections), if available:			
		-	-							
Remarks:										







A152 ZELES 2017 Signature: NV





A 52

EBBS -



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: NWA011

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	MINAT	ION DATA	FORM -	Midwes	st Region	1	
Project/Site:	Lake Ch	arlotte	City/	County:	Marti	n	Sampling [	Date:	10/19/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling F	Point:	NWA012A
Investigator(s):		Apryl Jennrich		Secti	on, Townshij	p, Range:		Sec.7 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Depress	sion	Local r	elief (concav	ve, conve	k, none):		Concave
Slope (%): 1	Lat:	43.73446		Long:	-94.467	'81	Datum:		WGS84
Soil Map Unit Name:	Webster cl	ay loam, 0 to 2 pe	ercent slop	bes	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, expl	ain in remar	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expl	ain any ar	nswers in remarks.)
SUMMARY OF FINE	DINGS								
Hydrophytic Vegetati	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	a within a	wetland?		No
Wetland Hydrology F	vresent?	No		lf yes, o	ptional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultur			0	al field.					
VEGETATION Use	e scientifi	•				1			
Trac Chrotum (D	1-4	Υ.		Dominant	Indicator	Domi	nance Test	Workshe	et
Tree Stratum (P	lot size:	)	% Cover	Species	Status		er of Domina	•	0 (4)
2						that ar	e OBL, FAC	W, or FAC:	(A)
3.							Sumber of Do Across All		(B)
4							t of Domina		ο/ (Λ/D)
5				=Total Cove	٥r	that ar	e OBL, FAC	W, or FAC:	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:	) -		-10101 0010		Preva	lence Inde	x Worksh	eet
<u></u>	(	,					% Cover of:		Multiply by:
2.						OBL	species	x 1	=
3.						FACV	V species	x 2	=
4.						FAC s	species	x 3	=
5						FACL	l species	x 4	=
		-		=Total Cove	er	UPLs	species	x 5	
Herb Stratum	(Plot size:	)					nn totals	(A	.)(B)
1						Preva	lence Index	$a = B/A = $ _	
	-								
3							phytic Veg		
4 5.							Dominance	• •	nytic vegetation
6							Prevalence		
7.							Morphologi	cal adapta	tions* (provide
8.									marks or on a
9.							separate sh	neet)	
10						_	Problemation	c hydrophy	rtic vegetation*
				=Total Cove	er		(explain)		
Woody Vine Stratum 1.		)					ors of hydric s unless distur		and hydrology must be lematic
2		-		=Total Cove	Pr	Veç	drophytic getation sent?	No	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWA012A

Profile Descr	iption: (Describe	e to the	depth needed	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		<u>R</u>	edox Fea	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10YR 2/1	100					Loam	
8-21	10YR 2/1	100					Loam	
21-24	2.5Y 3/2	95	2.5Y 4/2	5	D	м	Clay	
			2.01 4/2	5		101		
24-27	2.5Y 4/2	100					Sandy Clay	
27-28	2.5Y 5/3	100					Sandy Clay	
*Type: C =	Concentration, D	= Denle	tion RM = Red	uced Mat	rix MS =	Masked S	Sand Grains **Locati	on: PL = Pore Lining, M = Matri
Hydric Soil		Dopic			nx, mo	Mashea		ematic Hydric Soils*:
•	stosol (A1)		Sa	andy Gley	ed Matrix	(S4)		dox (A16) (LRR K, L, R)
	tic Epipedon (A2)			andy Red		· · /	Dark Surface (S	
	ack Histic (A3)			ripped Ma				Masses (F12) (LRR K, L, R)
	drogen Sulfide (A	4)	 Lo	amy Muc	ky Minera	al (F1)		rk Surface (TF12)
	atified Layers (A5			amy Gley	•	. ,	Other (explain in	
	m Muck (A10)			epleted M		-		
De	pleted Below Darl	k Surfac	e (A11) Re	edox Dark	Surface	(F6)		
Thi	ick Dark Surface (	(A12)	 De	epleted Da	ark Surfac	ce (F7)	*Indicators of hydrop	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Re	edox Depi	ressions (	F8)	, j j	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
estrictive La	ayer (if observed	D:						
ype:		.,.					Hydric Soil Preser	nt? No
Depth (inches	):				-			
Primary Indica Surface High W Saturat	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		equired; check	Aquatic True Aq Hydroge	Fauna (B Juatic Plai en Sulfide d Rhizosp	nts (B14) Odor (C	Surface Drainage 1) Dry-Sea Living Crayfish	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9
	eposits (B3)			_ `	ce of Red	uced Iron		or Stressed Plants (D1)
	lat or Crust (B4)				Iron Redu	uction in T		phic Position (D2)
	eposits (B5)		( <b>F</b> = )	(C6)		·	FAC-Ne	utral Test (D5)
	tion Visible on Ae			_	ick Surfac			
	ly Vegetated Con		irface (B8)	-	or Well Da		<b>`</b>	
	Stained Leaves (E	39)			Explain in	Remarks	5)	
ield Observa urface Water /ater Table F aturation Pre	r Present? Present? Present?	Yes Yes Yes	No No No	X X X	Depth (i Depth (i Depth (i	nches):	We	etland Hydrology Present? No
		m gauge	e, monitoring we	ell, aerial p	ohotos, pr	evious 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

Signature: NV

2017

Signature: DO



A1



2019





### Feature ID: NWA012

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**

Lake Charlotte Solar Martin County, Minnesota

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Ch	narlotte	City/	County:	Marti	n	Sampling [	Date:	10/19/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling F	oint:	NWA013A
Investigator(s):		Apryl Jennrich		Section	on, Townshi	p, Range:		Sec.8 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Depress	sion	Local r	elief (conca	ve, conve	k, none):		Concave
Slope (%): 1	Lat:	43.73354		Long:	-94.465	559	Datum:		WGS84
Soil Map Unit Name:	Webster cl	ay loam, 0 to 2 pe	ercent slop	es	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, expl	ain in remar	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, expl	ain any ar	swers in remarks.)
SUMMARY OF FINE	JINGS								
Hydrophytic Vegetat	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	a within a	wetland?		No
Wetland Hydrology F	Present?	No		If yes, or	otional wetla	nd site ID	:		
Remarks:									
Recently tilled agricultur		•	0	al field.					
VEGETATION Use	e scientifi	•							
Taxa Olas hara (D		,		Dominant	Indicator	Domi	nance Test	Workshee	et
Tree Stratum (P	lot size:	)	% Cover	Species	Status		er of Domina e OBL, FAC		0 (A)
2.							Number of Do		( )
3							es Across All		(B)
4 5.							nt of Dominar e OBL, FAC\		% (A/B)
				=Total Cove	r		,	,	
Sapling/Shrub Stratum	(Plot size:	)				Preva	alence Inde	x Workshe	eet
1						Total	% Cover of:	I	Multiply by:
2						OBL	species	x 1	=
3							V species	x 2	
4							species _		=
5	-			Tatal Cause	_		J species		=
Llark Stratum	(Dist size)	, <del>-</del>		=Total Cove	ſ	_	species	x 5	
Herb Stratum 1.	(Plot size:	)					nn totals	(A)	)(В)
2.						FIEVa	llence Index	= D/A = _	<u> </u>
2						Hydro	ophytic Veg	etation In	dicators:
3 4.									ytic vegetation
5.							Dominance	• •	
6							Prevalence	index is ≤	3.0*
7.							Morphologi	cal adaptat	ions* (provide
8							supporting	data in Rer	marks or on a
9						_	separate sh	,	
10								hydrophy	tic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.		)					ors of hydric s unless distur		and hydrology must be ematic
2		-		=Total Cove	r	Veç	drophytic getation sent?		
						Fre	SCIIL!	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWA013A

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
0-18	10YR 2/1	100					Clay Loam	
18-22	10YR 2/1	100					Sandy Clay	
22-24	2.5Y 3/2	99	10YR 5/6	1	С	PL		Distinct or Prominent
							Sandy Clay	
24-26	2.5Y 4/2	99	10YR 5/6	1	С	PL	Sandy Clay	Distinct or Prominent
*Type: C =	Concentration, D	– Donle	l ation RM - Redu	ced Matr	riv MS -	Masked 9	Sand Grains **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil		- Depie			IX, 1010 -	Maskeu	Indicators for Proble	0
-	stosol (A1)		Sar	ndv Glev	ed Matrix	(S4)		dox (A16) (LRR K, L, R)
	tic 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	, ,
2 c	m Muck (A10)				atrix (F3)			
De	pleted Below Darl	< Surfac	e (A11) Red	dox Dark	Surface	(F6)		
Thi	ick Dark Surface (	A12)	Dej	pleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Red	dox Depr	essions (	F8)	hydrology must be pr	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive La	ayer (if observed	):						
Type:		,					Hydric Soil Presen	t? No
Depth (inches	):				-			
HYDROLO								
-	rology Indicators							
	ators (minimum of	one is r	equired; check a					tors (minimum of two required)
	e Water (A1)				Fauna (B			Soil Cracks (B6)
	/ater Table (A2)				uatic Plar	```		e Patterns (B10)
<u> </u>	tion (A3)				en Sulfide			son Water Table (C2)
	Marks (B1) ent Deposits (B2)				d Rhizosp	heres on		Burrows (C8) on Visible on Aerial Imagery (C9)
	eposits (B3)			Roots (C	co of Red	iced Iron		or Stressed Plants (D1)
	lat or Crust (B4)							phic Position (D2)
	eposits (B5)			(C6)				utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	e (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	5)	
Field Observa	ations:							
Surface Water	r Present?	Yes	No	Х	Depth (ii	nches):		tland Hydrology
Water Table F		Yes	No	Х	Depth (ii	· -	vve	Present?
Saturation Pre		Yes	No	Х	Depth (ii	nches):		No
(includes capi		m co	monitoria		hotos -		(apportions) if available	
Describe Reco	Jided Data (střeal	m gauge	e, monitoring wei	i, aeriai p	motos, pr	evious 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: NWA013

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**

Lake Charlotte Solar Martin County, Minnesota

	WET	LAND DETER	MINAT	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Ch	narlotte	City/	County:	Marti	n	Sampling [	Date:	10/19/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling F	oint:	NWA014A
Investigator(s):		Apryl Jennrich		Section	on, Townshi	p, Range:		Sec.8 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Swal	е	Local r	elief (conca	ve, conve	k, none):		Concave
Slope (%): 2	Lat:	43.7329		Long:	-94.464	183	Datum:		WGS84
Soil Map Unit Name:	Webster c	lay loam, 0 to 2 pe	ercent slop	es	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, expl	ain in remar	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, expl	ain any ar	swers in remarks.)
SUMMARY OF FINE	DINGS								
Hydrophytic Vegetat	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	a within a	wetland?		No
Wetland Hydrology F	vresent?	No		lf yes, op	otional wetla	nd site ID:			
Remarks:									
Recently tilled agricultur		•	0	al field.					
VEGETATION Use	e scientifi	•		<u> </u>		·			
Tree Stratum (P		``		Dominant Species	Indicator Status	Domi	nance Test	worksnee	et
<u>1.</u>	lot size:	)	% Cover	Species	Status		er of Domina	•	0 (0)
2						that ar	e OBL, FAC\	N, or FAC:	(A)
3.							Number of Do s Across All		(B)
4							nt of Domina		
5				=Total Cove	r	that are	e OBL, FAC\	N, or FAC:	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:	) -			1	Preva	alence Inde	x Worksh	et
1.	(1 101 0120.	/					% Cover of:		Multiply by:
2.							species	x 1	
3.						FACV	· V species	x 2	=
4.						FAC s	species	x 3	=
5.						FACL	J species		=
		_		=Total Cove	r	UPL s	species	x 5	
Herb Stratum	(Plot size:	)				Colun	nn totals	(A	)(B)
1		_				Preva	lence Index	= B/A = _	
2									
3							ophytic Veg		
4 5.							Dominance		ytic vegetation
5 6.							Prevalence		
7									tions* (provide
8.									marks or on a
9.							separate sh		
10.							Problematio	hydrophy	tic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.		)					ors of hydric s unless distur		and hydrology must be ematic
2		-		=Total Cove	r	Veç	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWA014A

Profile Descr							1		
Depth	<u>Matrix</u>		Re	edox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Те	kture	Remarks
0-10	10YR 2/1	100					Clay	Loam	
10-25	10YR 2/1	100					C	Clay	
				4	0	DI		•	
25-30	2.5Y 5/3	99	10YR 5/6	1	С	PL	Sand	dy Clay	Distinct or Prominent
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked \$	Sand Grains	. **Locatio	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicato	ors for Proble	matic Hydric Soils*:
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coa	ast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dar	k Surface (S7	7) (LRR K, L)
Bla	ack Histic (A3)		Str	ipped Ma	trix (S6)		Iron	-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)			ky Minera	al (F1)		-	rk Surface (TF12)
	ratified Layers (A5			-	ed Matrix			er (explain in	, ,
	cm Muck (A10)			pleted Ma				· ·	
	pleted Below Darl	k Surfac			Surface	(F6)			
	ick Dark Surface (		· · ·		ark Surfac	` '	*Indiaat	are of hudronk	wie verstetien and wetland
	indy Mucky Minera				essions (				ytic vegetation and wetland esent, unless disturbed or
	cm Mucky Peat or				00010110 (	10)	problem		
		-	0)						
	ayer (if observed	l):							
Type:							Hydric	: Soil Presen	t? <u>No</u>
Type: Depth (inches Remarks:	s):						Hydric	: Soil Presen	t? <u>No</u>
Depth (inches	s):						Hydric	: Soil Presen	t? <u>No</u>
Depth (inches Remarks:							Hydric	Soil Presen	t? <u>No</u>
Depth (inches Remarks: HYDROLO	GY						Hydric	Soil Presen	t? <u>No</u>
Depth (inches Remarks: HYDROLO Wetland Hyd	GY Irology Indicators		equired: check a	all that ap					
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indica	GY Irology Indicators ators (minimum of		equired; check a					ondary Indica	tors (minimum of two required)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indica Surfac	GY Irology Indicators ators (minimum of e Water (A1)		equired; check a	Aquatic	Fauna (B			ondary Indica	tors (minimum of two required) Soil Cracks (B6)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W	<b>GY</b> Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; check a	Aquatic True Aq	Fauna (B uatic Plar	nts (B14)	Sec	ondary Indica	<u>tors (minimum of two required)</u> Soil Cracks (B6) ∋ Patterns (B10)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura	<b>GY</b> Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		equired; check a	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	<u>Sec</u>	ondary Indica Surface Drainage Dry-Sea	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indica Surfac Under High W Satura Water	<b>GY</b> <b>Irology Indicators</b> <u>ators (minimum of</u> e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired; check a	Aquatic True Aq Hydroge Oxidized	Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	<u>Sec</u>	ondary Indica Surface Drainage Dry-Sea Crayfish	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Sedimo	<b>GY</b> rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		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	Sec 1) Living	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatic	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9
HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Sedime Drift Do	<b>GY</b> rology Indicators ators (minimum of e Water (A1) Vater 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	1) 1 Living (C4)	ondary Indica Surface Drainage Dry-Seas Crayfish Saturatic Stunted	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)
HYDROLO Remarks: HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Satura Confit Do Algal M	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat 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	Sec 1) Living	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	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)
HYDROLO Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Satura Drift Do Algal M Iron De	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 Aq Hydroge Oxidized Roots (C Presend Recent (C6)	Fauna (B uatic Plar en Sulfide d Rhizosp d Rhizosp (3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T	1) 1 Living (C4)	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	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)
Depth (inches Remarks: Remarks: HYDROLO Wetland Hyd Primary Indica Surfac Unift Du Satura Water Sedimo Algal M Iron De Inunda	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>one is r</u> rial Imag	  gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu	Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu Iron Redu ck Surfac	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	1) 1 Living (C4)	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	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)
HYDROLO Remarks: HYDROLO Wetland Hyd Primary Indica Surfac Surfac High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse	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 ely Vegetated Con	<u>one is r</u> rial Imag cave Su	  gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C	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 ucced Iron uction in T ce (C7) ata (D9)	1) Living (C4) Tilled Soils	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	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)
HYDROLO Remarks: HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Orift Do Algal M Iron De Inunda Sparse Water-	<b>GY</b> <b>rology Indicators</b> <u>ators (minimum of</u> 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	<u>one is r</u> rial Imag cave Su	  gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C	Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu Iron Redu ck Surfac	nts (B14) Odor (C oheres on ucced Iron uction in T ce (C7) ata (D9)	1) Living (C4) Tilled Soils	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	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)
HYDROLO Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Sedimo Algal M Iron De Inunda Sparse Water- Field Observ	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 ely Vegetated Con Stained Leaves (E ations:	one is r rial Imag cave Su 39)	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (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 ucced Iron uction in T ce (C7) ata (D9) Remarks	1) Living (C4) Tilled Soils	ondary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted X Geomor	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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Depth (inchess Remarks: Remarks: HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre	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 ely Vegetated Con Stained Leaves (E rations: ar Present? Present? esent?	rial Imag cave Su 39) Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E	Fauna (B uatic Plan 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 7 ce (C7) ata (D9) Remarks nches):	1) Living (C4) Tilled Soils	ondary Indica Surface Drainage Crayfish Saturatic Stunted X Geomorg FAC-Net	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) tland Hydrology
Pepth (inchess Remarks: Remarks: HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Satura Unift De Inunda Sparse Water- Field Observ Surface Wate Water Table P Saturation Pre (includes capi	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 ely Vegetated Con Stained Leaves (E rations: r Present? esent? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E X X X	Fauna (B uatic Plar en Sulfide d Rhizosp C3) 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 7 ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils	ondary Indica Surface Drainage Dry-Seas Crayfish Saturatic Stunted X Geomory 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 (inchess Remarks: Remarks: HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Satura Unift De Inunda Sparse Water- Field Observ Surface Wate Water Table P Saturation Pre (includes capi	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 ely Vegetated Con Stained Leaves (E rations: r Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E X X X	Fauna (B uatic Plar en Sulfide d Rhizosp C3) 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 7 ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils	ondary Indica Surface Drainage Dry-Seas Crayfish Saturatic Stunted X Geomory 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)
Pepth (inchess Remarks: Remarks: HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Satura Unift De Inunda Sparse Water- Field Observ Surface Wate Water Table P Saturation Pre (includes capi	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 ely Vegetated Con Stained Leaves (E rations: r Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E X X X	Fauna (B uatic Plar en Sulfide d Rhizosp C3) 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 7 ce (C7) ata (D9) Remarks nches): nches):	1) I Living I (C4) Tilled Soils	ondary Indica Surface Drainage Dry-Seas Crayfish Saturatic Stunted X Geomory FAC-Neu	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) or Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)







80 120 160 200 40 0



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7850-

-1152-







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: NWA014

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**

Lake Charlotte Solar Martin County, Minnesota

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	st Region	1	
Project/Site:	Lake Ch	narlotte	City/	County:	Martin	n	Sampling [	Date:	10/19/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling F	Point:	NWA015A
Investigator(s):		Apryl Jennrich		Secti	on, Townshi	p, Range:		Sec.8 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Depress	sion	Local r	elief (concav	ve, conve	k, none):		Concave
Slope (%): 1	Lat:	43.73174		Long:	-94.465	37	Datum:		WGS84
Soil Map Unit Name:	Webster cl	ay loam, 0 to 2 pe	ercent slop	bes	NW	I Classific	ation:		NA
Are climatic/hydrologic co	nditions of t	he site typical for	this time o	of the year?	Yes (	lf no, expl	ain in remar	ˈks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	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	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	a within a	wetland?		No
Wetland Hydrology F	Present?	No		lf yes, o	otional wetla	nd site ID:			
Remarks:									
Recently tilled agricultur			0	ral field.					
VEGETATION Use	e scientifi			<b>D</b>		1			-
Taxa Olas hara (D		ζ.		Dominant	Indicator	Domii	nance Test	Workshe	et
Tree Stratum (P	lot size:	)	% Cover	Species	Status		er of Domina e OBL, FAC	•	0 (A)
2							lumber of Do		(1)
3.							s Across All		(B)
4 5.							nt of Dominal e OBL, FAC		% (A/B)
				=Total Cove	er	linat ai	e obl, i Ac	w, of t AC.	((112)
Sapling/Shrub Stratum	(Plot size:	)				Preva	lence Inde	x Worksh	eet
1.						Total	% Cover of:		Multiply by:
2.						OBL s	species	x 1	=
3.						FACV	V species	x 2	=
4.						FAC s	species		=
5							species	x 4	=
		-		=Total Cove	er		species	x 5	
Herb Stratum	(Plot size:	)					nn totals	(A	)(B)
1						Preva	lence Index	a = B/A = -	
						L la calma			diantana
3 4.							phytic Veg		nytic vegetation
5							Dominance	• •	
6							Prevalence		
7.							Morphologi	cal adapta	tions* (provide
8.							supporting	data in Re	marks or on a
9.							separate sh	neet)	
10.							Problematio	c hydrophy	tic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.		)					ors of hydric s unless distur		and hydrology must be lematic
2		-		=Total Cove	r	Veç	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo r Less corn stalks. Barnyard									

NWA015A

Depth							or confirm the absence	,
	Matrix		Re	edox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-29	10YR 2/1	100					Clay	
29-33	2.5Y 4/3	99	10YR 5/6	1	С	PL	Sandy Clay	Distinct or Prominent
*= 0								
	Concentration, D	= Deple	tion, RM = Red	uced Mati	rix, MS =	Masked S		on: PL = Pore Lining, M = Matrix
Hydric Soil			0-		<b></b>	(04)		ematic Hydric Soils*:
	stosol (A1)				ed Matrix	(54)		dox (A16) (LRR K, L, R)
	stic Epipedon (A2)			ndy Redo			Dark Surface (S	
	ack Histic (A3)			ipped Ma	. ,			Masses (F12) (LRR K, L, R)
	vdrogen Sulfide (A			-	ky Minera			rk Surface (TF12)
	ratified Layers (A5	)		• •	ed Matrix	(F2)	Other (explain in	remarks)
	cm Muck (A10)			pleted Ma	. ,			
	epleted Below Darl		· · <u> </u>		Surface	. ,		
	ick Dark Surface (	,		•	ark Surfac	( )		hytic vegetation and wetland
	andy Mucky Minera	. ,		dox Depr	essions (	F8)	hydrology must be pr problematic	esent, unless disturbed or
5 c	cm Mucky Peat or	Peat (S	3)				problematic	
Restrictive L	ayer (if observed	l):						
Туре:							Hydric Soil Preser	nt? No
Depth (inches	s):							
Wetland Hyd	rology Indicators							
Wetland Hyd Primary Indica	Irology Indicators ators (minimum of		equired; check a				· · · · · ·	ators (minimum of two required)
Wetland Hyd Primary Indica Surfac	<b>Irology Indicators</b> ators (minimum of e Water (A1)		equired; check a	Aquatic	Fauna (B	,	Surface	Soil Cracks (B6)
Wetland Hyd Primary Indica Surfaca High W	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)		equired; check a	Aquatic True Aq	Fauna (B uatic Plar	nts (B14)	Surface	Soil Cracks (B6) e Patterns (B10)
Wetland Hyd Primary Indica Surfac High W Satura	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)		equired; check a	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	Surface Drainag 1)Dry-Sea	Soil Cracks (B6) e Patterns (B10) son Water Table (C2)
Wetland Hyd Primary Indica Surfac High W Satura Water	<b>Irology Indicators</b> ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired; check a	Aquatic True Aq Hydroge Oxidized	Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14)	Surface Drainag 1) Dry-Sea Living Crayfish	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8)
Wetland Hyd Primary Indica Surfac High W Satura Water Sedimo	Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		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	Surface Drainag 1) Dry-Sea Living Crayfish	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9
Wetland Hyd Primary Indica Surfac High W Satura Water Sedime Drift Do	Irology Indicators ators (minimum of e Water (A1) Vater 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 <sup>2</sup> oheres on	1) Surface Drainag Dry-Sea Crayfish Saturatio (C4) Stunted	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M	Irology Indicators 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	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu	nts (B14) Odor (C <sup>2</sup> oheres on	Surface Surface Drainag Dry-Sea Living Crayfish Saturation (C4) Stunted Tilled Soils X Geomor	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)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De	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)	one is I		Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6)	Fauna (B uatic Plar on Sulfide d Rhizosp d Rhizosp C3) ce of Redu Iron Redu	onts (B14) Odor (C oheres on uced Iron uction in T	Surface Surface Drainag Dry-Sea Living Crayfish Saturation (C4) Stunted Tilled Soils X Geomor	Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1)
Wetland Hyd Primary Indica Surfac High W Satura Water Sedimo Drift Do Algal M Iron Do Inunda	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 Ima	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac	onts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Surface Surface Drainag Dry-Sea Living Crayfish Saturation (C4) Stunted Tilled Soils X Geomor	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)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De 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	one is r rial Imag cave Su	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ce of Redu Iron Redu ck Surfac or Well Da	odor (C <sup>2</sup> oheres on uced Iron uction in T ce (C7) ata (D9)	Surface Drainag 1) Dry-Sea Living Crayfish Saturatii (C4) Stunted Tilled Soils X Geomor FAC-Ne	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)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De 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	one is r rial Imag cave Su	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C	Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp 23) ce of Redu Iron Redu ck Surfac or Well Da	onts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Surface Drainag 1) Dry-Sea Living Crayfish Saturatii (C4) Stunted Tilled Soils X Geomor FAC-Ne	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)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De 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:	rial Imag cave Su 39)	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge c 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 (C oheres on ucced Iron uction in T ce (C7) ata (D9) Remarks	Surface Drainag 1) Dry-Sea Living Crayfish Saturatii (C4) Stunted Tilled Soils X Geomor FAC-Ne	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)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De 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)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C 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 (C oheres on ucced Iron uction in T ce (C7) ata (D9) Remarks nches): _	Surface Surface Drainag Dry-Sea Living Crayfish Saturation (C4) Stunted Tilled Soils X Geomor FAC-Ne	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) utral Test (D5)
Wetland Hyd         Primary Indica         Surface         High W         Satura         Water         Sedime         Drift De         Algal M         Iron De         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) ation Visible on Ae ely Vegetated Con Stained Leaves (B rations: er Present?	rial Imag cave Su 39) Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E 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 (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Surface Surface Drainag Dry-Sea Living Crayfish Saturation (C4) Stunted Tilled Soils X Geomor FAC-Ne	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) utral Test (D5)
Wetland Hyd         Primary Indica         Surface         High W         Satura         Water         Sedima         Drift De         Algal M         Iron De         Nurdae         Sparse         Water-         Field Observ         Surface Wate         Saturation Press	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?	rial Imag cave Su 39) Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C 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 (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Surface Surface Drainag Dry-Sea Living Crayfish Saturation (C4) Stunted Tilled Soils X Geomor FAC-Ne	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) utral Test (D5)
Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table P Saturation Pre (includes capi	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 eStained Leaves (E rations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E 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 (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Surface Surface Drainag Dry-Sea Living Crayfish Saturation (C4) Stunted Tilled Soils X Geomor FAC-Ne	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) utral Test (D5)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre (includes capi	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 eStained Leaves (E rations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E 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 (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	) Surface Surface Drainag Dry-Sea Living Crayfish Saturatii (C4) Stunted Tilled Soils X Geomor FAC-Ne	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) utral Test (D5)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre (includes capi	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 eStained Leaves (E rations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E 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 (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	) Surface Surface Drainag Dry-Sea Living Crayfish Saturatii (C4) Stunted Tilled Soils X Geomor FAC-Ne	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) utral Test (D5)
Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre (includes capi	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 eStained Leaves (E rations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge C Other (E 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 (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	) Surface Surface Drainag Dry-Sea Living Crayfish Saturatii (C4) Stunted Tilled Soils X Geomor FAC-Ne	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) utral Test (D5)

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Ch	narlotte	City/	County:	Martir	า	Sampling D	ate:	10/19/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling Po	oint:	NWA015B
Investigator(s):		Apryl Jennrich		Section	on, Township	o, Range:		Sec.8 T10	3N R30W
Landform (hillslope, terrac	;e, etc.):	Plair	า	Local r	elief (concav	/e, conve>	k, none):		None
Slope (%): 1	Lat:	43.73181		Long:	-94.465	24	Datum:		WGS84
Soil Map Unit Name:	Webster c	ay loam, 0 to 2 pe	ercent slop	es	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, expl	ain in remark	s)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	mstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expla	in any an	swers in remarks.)
SUMMARY OF FINE	DINGS								
Hydrophytic Vegetat	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	within a	wetland?		No
Wetland Hydrology F	Present?	No		lf yes, op	otional wetla	nd site ID:	:		
Remarks:									
Recently tilled agricultur		•	0	al field.					
VEGETATION Use	e scientifi	•		<u> </u>					
Tree Stratum (P		``	% Cover	Dominant	Indicator Status	Domi	nance Test \	vorksnee	t
<u>1.</u>	lot size:	)	% Cover	Species	Status		er of Dominan		0 (A)
2						that ar	e OBL, FACW	, or FAC:	(A)
3.							Number of Dor s Across All S		(B)
4							nt of Dominan		
5				=Total Cove	r	that are	e OBL, FACW	/, or FAC:	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:	) -			1	Preva	alence Index	Workshe	et
1.	(1 101 0120.	/					% Cover of:		/ultiply by:
2.						_	species	x 1 :	
3.						FACV	· V species	x 2 =	=
4.						FAC s	species	x 3 :	=
5.						FACL	J species		=
		-		=Total Cove	r	UPL s	species	x 5 =	
Herb Stratum	(Plot size:	)				Colun	nn totals	(A)	(B)
1						Preva	lence Index	= B/A =	
2						_			
3						-	ophytic Veg		
4 5.							Dominance 1		vtic vegetation
5 6							Prevalence i		
7									ons* (provide
8.									narks or on a
9.							separate she	eet)	
10.							Problematic	hydrophyt	ic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.		)					ors of hydric so unless disturb		nd hydrology must be ematic
2		-		=Total Cove	r	Veç	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural			te sheet)						

NWA015B

Depth	1							ence of indicators.)
	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-28	10YR 2/1	100					Clay	
28-33	2.5Y 4/2	100					Clay	
							-	
+ <b>T</b> 0								
<u>,</u>	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked S		cation: PL = Pore Lining, M = Matrix
Hydric Soil						(0.1)		oblematic Hydric Soils*:
	stosol (A1)				ed Matrix	(S4)		e Redox (A16) (LRR K, L, R)
	stic Epipedon (A2)			ndy Redo				e (S7) (LRR K, L)
	ack Histic (A3)			ipped Ma	( )			ese Masses (F12) (LRR K, L, R)
	drogen Sulfide (A			-	ky Minera			v Dark Surface (TF12)
	ratified Layers (A5	)			ed Matrix	(F2)	Other (expla	in in remarks)
	cm Muck (A10)	<b>• · ·</b>			atrix (F3)			
	pleted Below Dark				Surface	``		
	ick Dark Surface (	,			ark Surfac	. ,		Irophytic vegetation and wetland
	indy Mucky Minera	. ,		dox Depr	essions (	F8)	problematic	e present, unless disturbed or
50	cm Mucky Peat or	Peat (S	3)				F	
Restrictive La	ayer (if observed	):						
Туре:					-		Hydric Soil Pre	esent? No
Depth (inches	s):				-			
Wetland Hyd	rology Indicators							
Wetland Hyd	rology Indicators ators (minimum of		equired; check a				· · · · ·	ndicators (minimum of two required)
Wetland Hyd Primary Indica	rology Indicators		equired; check a	Aquatic	Fauna (B		Surf	ace Soil Cracks (B6)
Wetland Hyd Primary Indica Surface	rology Indicators ators (minimum of		equired; check a	Aquatic			Surf	·····
Wetland Hydr Primary Indica Surface High W Saturat	<b>Irology Indicators</b> <u>ators (minimum of</u> e Water (A1) Vater Table (A2) tion (A3)		equired; check a	Aquatic True Aq Hydroge	Fauna (B uatic Plar en Sulfide	nts (B14) Odor (C	Surf Drai 1)Dry-	ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)
Wetland Hydr Primary Indica Surface High W Saturat Water I	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired; check a 	Aquatic True Aq Hydroge Oxidized	Fauna (B uatic Plar en Sulfide d Rhizosp	nts (B14) Odor (C	Surf Drai 1)Dry- LivingCray	ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8)
Wetland Hydr Primary Indica Surface High W Saturat Water I Sedime	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		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	Surf Drai 1)Dry- LivingCray Satu	ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) ıration Visible on Aerial Imagery (C9
Wetland Hydr Primary Indica Surface High W Saturat Water I Sedime Drift De	rology Indicators ators (minimum of e Water (A1) Vater 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) ce of Redu	nts (B14) Odor (C oheres on uced Iron	Surf Drai Dry- LivingCray Satu (C4)Stur	ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) ıration Visible on Aerial Imagery (C9 ıted or Stressed Plants (D1)
Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M	rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4)		equired; check a	Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	nts (B14) Odor (C oheres on uced Iron		ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) uration Visible on Aerial Imagery (C9 uted or Stressed Plants (D1) morphic Position (D2)
Wetland Hydr Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De	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		Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6)	Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	nts (B14) Odor (C oheres on uced Iron uction in T		ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) ıration Visible on Aerial Imagery (C9 ıted or Stressed Plants (D1)
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