Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mo	ntgomery County		Sampling Date: 20	021-Aug-19
Applicant/Owner: S	unEast				State: NY		Sampling Point: W-k	(CF-07_PEM-1
Investigator(s): Kevi	n Ferguson, B	rian Corrigan		S	ection, Township, R	ange: N	Ą	
Landform (hillslope, te	rrace, etc.):	Depression		Local re	ief (concave, convex	k, none):	Convex	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		L	at: 42.885999	Long:	-74.498344	Datum: WGS84
Soil Map Unit Name:	Lansing silt	loam, LaD-15-25	% slopes				NWI classificati	on: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No _	(If no	, explain in Remarks	.)
•	Soil, Soil,	or Hydrology or Hydrology	0	5			tances" present? y answers in Remark	Yes 🟒 No s.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes No	lf yes, optional Wetland Site ID:	W-KCF-07
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PEM. Area is wetland, all three v	wetland parameters are p	resent.	

Wetland Hydrology Indicators:				
Primary Indicators (minimum of	one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial I</li> <li>Sparsely Vegetated Concave</li> </ul>	Aquat Marl E Hydro Oxidiz Preser Recen Thin M magery (B7) Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living R nce of Reduced Iron (C4) t Iron Reduction in Tilled Soi Auck Surface (C7) (Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No _ <b>_/</b> Yes No _ <b>_/</b> Yes _ <b>_/</b> _ No	Depth (inches): Depth (inches): Depth (inches):	4	Wetland Hydrology Present? Yes No
(includes capillary fringe)	·····			-
Describe Recorded Data (stream Remarks: The criterion for wetland hydrolo				available: rved (primary and secondary indicators were present

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-07\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test work Number of Dominant Are OBL, FACW, or FA	t Species That	1	(A)
1 2		·		Total Number of Don Across All Strata:		1	(B)
3 4		·		Percent of Dominant Are OBL, FACW, or FA	•	100	(A/B)
5		<u> </u>		Prevalence Index wo	rksheet:		
6 7.		<u> </u>		- <u>Total % Cove</u>	<u>er of:</u>	<u>Multiply</u>	<u>By:</u>
/				- OBL species	0	x 1 =	0
	0	= Total Cov	er	FACW species	110	x 2 =	220
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
1				- FACU species	0	x 4 =	0
				- UPL species	0	x 5 =	0
3				- Column Totals	110	(A)	220 (B)
4				- Prevalence	Index = B/A =	2 -	
				Hydrophytic Vegetati			
5				1- Rapid Test for		logotation	
7						egetation	
	0	= Total Cov	er	2 - Dominance I			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphologic		(Drovido	cupporting
1. Phragmites australis	100	Yes	FACW	- data in Remarks or o			supporting
2. Impatiens capensis	10	No	FACW	Problematic Hy	-		nlain)
3.				- <sup>1</sup> Indicators of hydric s			
4.				present, unless distu		,	gy must be
5				Definitions of Vegetar	,	latie	
6.		·		Tree – Woody plants		r more in i	diameter a
7.				breast height (DBH),			
8.		······································		Sapling/shrub – Woo	•	•	OBH and
<u> </u>		·		greater than or equa	51		
				Herb – All herbaceou			gardless of
		·		size, and woody plan			
				Woody vines - All wo			.28 ft in
12		- Tatal Car		height.	- 0		
Woody Vine Stratum (Plot size: <u>30 ft</u> )	110	= Total Cov	er	Hydrophytic Vegetat	ion Present?	/es N	lo
1				_			
2				_			
3.							
4.							
	0	= Total Cov	er	-			

Remarks: (Include photo numbers here or on a separate sheet.) A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

	cription: (Describe	to the d	•			ndicato	or confirm the al	osence of indicato	ors.)
Depth	Matrix	0/	Redox			1	Taute		Demente
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu		Remarks
0 - 8	10YR 4/2	100		10			Silty Clay		
8 - 20	10B 4/1	90	10YR 5/6	10	C	M	Silty Clay	Loam	
				—					
·									
·									
<sup>1</sup> Type: C = 0	Concentration, D =	Depleti	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> Lo	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils <sup>3</sup> :
Histoso			Polyvalue Be					2 cm Muck (	(A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Su						e Redox (A16) <b>(LRR K, L, R)</b>
	istic (A3)		Loamy Muck	-		(LRR K, I	_)		Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye					Dark Surface	e (S7) <b>(LRR K, L)</b>
	d Layers (A5)	(A 1 /	Depleted Ma					Polyvalue Be	elow Surface (S8) <b>(LRR K, L)</b>
	d Below Dark Surf ark Surface (A12)	lace (AT	Depleted Dark					Thin Dark Su	urface (S9) <b>(LRR K, L)</b>
	Aucky Mineral (S1)		Redox Depre					Iron-Manga	nese Masses (F12) <b>(LRR K, L, R)</b>
,	Gleyed Matrix (S4)			55101	15 (FO)			Piedmont Fl	oodplain Soils (F19) <b>(MLRA 149B)</b>
-	Redox (S5)							Mesic Spodi	c (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	d Matrix (S6)							Red Parent l	
	u Macrix (50) Irface (S7) <b>(LRR R,</b> I								v Dark Surface (TF12)
Dark SU	(11ace (37) <b>(LKK K, 1</b>		·9D)					Other (Expla	ain in Remarks)
<sup>3</sup> Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must be	e presen	t, unless disturbe	d or problematic.	
Restrictive	Layer (if observed)	):							
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:									
A positive i	ndication of hydrid	soil wa	s observed. The c	riterio	on for hyd	dric soil	is met.		

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mon	tgomery Co	unty		Sampling Date:	2021-Aug-19
Applicant/Owner: S	unEast				State:	New Yor	k	Sampling Point: <u>V</u>	V-KCF-07_UPL-1
Investigator(s): Kevin	n Ferguson, B	rian Corrigan		See	tion, Towns	ship, Ran	ge: NA	A	
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relie	f (concave, o	convex, n	none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLR	RA): LRR	L		Lat	42.885909	98	Long:	-74.4984308	Datum: WGS84
Soil Map Unit Name:	Lansing silt	oam, LaD, 15-25	% slopes					NWI classifica	ation: None
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🖌	_ No	_(lf no	, explain in Remar	ks.)
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	0	5				ances" present? / answers in Rema	Yes 🟒 No arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report	)	
Covertype is UPL. Area is upland, not all three	e wetland parameters are	e present.	

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	ne is required; check all t	<u>:hat apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Statement</li> </ul>	0,	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _✔ Yes No _✔ Yes No _✔	Depth (inches): Depth (inches): Depth (inches):	_ 
Remarks:		erial photos, previous inspections), if	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-07\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant		Dominance Test works			
	% Cover	Species?	Status	Number of Dominant S		0	(A)
. Rhus aromatica	15	Yes	UPL	Are OBL, FACW, or FAC			
				Total Number of Domin	hant Species	5	(B)
				Across All Strata:			
1.				Percent of Dominant S		0	(A/B
5.				Are OBL, FACW, or FAC			
		·		<ul> <li>Prevalence Index works</li> </ul>			
				Total % Cover		<u>Multiply</u>	•
·	15	= Total Cov	or	- OBL species	0	x 1 =	0
contine (Church Church und (Diet einen 15 ft)	15		ei	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )	45		EA CL	FAC species	0	x 3 =	0
. Rubus idaeus	15	Yes	FACU	- FACU species	140	x 4 =	560
<u></u>				- UPL species	15	x 5 =	75
3				- Column Totals	155	(A)	635 (E
I				- Prevalence Ir		4.1	· · · · · ·
							·
5				Hydrophytic Vegetation			
7.				- 1- Rapid Test for H		egetation	1
	15	= Total Cov	er	2 - Dominance Te			
<u>Herb Stratum (Plot size: _5 ft)</u>		-		3 - Prevalence Ind			
I. Solidago canadensis	90	Yes	FACU	4 - Morphological	•	•	supportir
2. Parthenocissus quinquefolia	10	No	FACU	- data in Remarks or on	•		
3.				Problematic Hydr			
				- <sup>1</sup> Indicators of hydric so		-	ogy must b
4 5.				present, unless disturb		natic	
				Definitions of Vegetation			
5				Tree – Woody plants 3			diameter
7				breast height (DBH), re	-	-	
3				Sapling/shrub - Woody			DBH and
Э				greater than or equal t			
10				Herb – All herbaceous	-		gardless o
11				size, and woody plants			
12.				Woody vines – All wood	dy vines great	er than 3	3.28 ft in
	100	= Total Cov	er	height.			
<u>Woody Vine Stratum (Plot size:30 ft)</u>				Hydrophytic Vegetatio	n Present?	′es I	No 🟒
1. Vitis aestivalis	15	Yes	FACU				
2. Parthenocissus quinquefolia	10	Yes	FACU	-			
	10	162	FACU	-			
3	<u></u> .			-			
4				-			
	25	= Total Cov	er				

Remarks: (Include photo numbers here or on a separate sheet.) No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

SOIL

0 - 8 8 - 20 1 Type: C = Conce Hydric Soil Indice Histosol (A1) Histic Epipeet Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Gleyee Sandy Redo: Sandy Redo: Sandy Redo: Sandy Redo: Sandy Redo: Sandy Redo: Sandy Redo: Sandy Surface All Concerners Sandy Surface Sandy Surface All Concerners Sandy Surface All Concerners Sandy Surface All Concerners Black Histic ( Hydrogen Su Sandy Redo: Sandy Surface All Concerners Sandy Surface Black Surface Black Surface Black Surface	cators: (A3) (A3) Sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5)
0 - 8 8 - 20 1 Type: C = Conce Hydric Soil Indic Histosol (A1) Histic Epipec Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleye Sandy Gleye Sandy Gleye Sandy Gleye Sandy Gleye Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	10YR 4/3 10YR 5/4 10YR 5/4 centration, D = cators: 1) cdon (A2) (A3) sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) px (S5) atrix (S6)
8 - 20	10YR 5/4 10YR 5/4 centration, D = cators: ) cators: ) cdon (A2) (A3) Sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) px (S5) atrix (S6)
<sup>1</sup> Type: C = Conco Hydric Soil Indic Histosol (A1) Histic Epiped Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Mucky Sandy Redo: Stripped Ma Dark Surface <sup>3</sup> Indicators of hy Restrictive Layer Type Dep	centration, D = cators: ) (A3) sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) px (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layee Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Hydric Soil Indic Histosol (A1) Histic Epipeo Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Mucky Sandy Gleyee Sandy Redo: Stripped Ma Dark Surface Indicators of hy Restrictive Layer Type Dep Remarks:	cators: (A3) Gulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
<ul> <li>Histosol (A1)</li> <li>Histic Epiped</li> <li>Black Histic (</li> <li>Hydrogen St</li> <li>Stratified Lat</li> <li>Depleted Be</li> <li>Thick Dark S</li> <li>Sandy Muck</li> <li>Sandy Redot</li> <li>Sandy Redot</li> <li>Stripped Ma</li> <li>Dark Surface</li> <li>Indicators of hy</li> <li>Restrictive Layee</li> <li>Type</li> <li>Dep</li> <li>Remarks:</li> </ul>	l) (A3) (A3) Sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
<ul> <li>Histic Epiped</li> <li>Black Histic (</li> <li>Hydrogen St</li> <li>Stratified Lay</li> <li>Depleted Be</li> <li>Thick Dark S</li> <li>Sandy Mucky</li> <li>Sandy Redox</li> <li>Sandy Redox</li> <li>Stripped Ma</li> <li>Dark Surface</li> <li><sup>3</sup>Indicators of hy</li> <li>Restrictive Layee</li> <li>Type</li> <li>Dep</li> <li>Remarks:</li> </ul>	don (A2) (A3) Sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Black Histic (     Hydrogen Su     Stratified Lay     Depleted Be     Thick Dark S     Sandy Muck     Sandy Gleye     Sandy Redo:     San	(A3) Sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
<ul> <li>Hydrogen Su</li> <li>Stratified Lay</li> <li>Depleted Be</li> <li>Thick Dark S</li> <li>Sandy Mucky</li> <li>Sandy Redox</li> <li>Sandy Redox</li> <li>Stripped Ma</li> <li>Dark Surface</li> <li>Indicators of hy</li> <li>Restrictive Layee</li> <li>Type</li> <li>Dep</li> <li>Remarks:</li> </ul>	sulfide (A4) ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
<ul> <li>Stratified Lay</li> <li>Depleted Be</li> <li>Thick Dark S</li> <li>Sandy Mucky</li> <li>Sandy Redox</li> <li>Sandy Redox</li> <li>Stripped Ma</li> <li>Dark Surface</li> <li><sup>3</sup>Indicators of hy</li> <li>Restrictive Laye</li> <li>Type</li> <li>Dep</li> <li>Remarks:</li> </ul>	ayers (A5) elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
<ul> <li>Depleted Be</li> <li>Thick Dark S</li> <li>Sandy Muck</li> <li>Sandy Gleye</li> <li>Sandy Redox</li> <li>Stripped Ma</li> <li>Dark Surface</li> <li>Indicators of hy</li> <li>Restrictive Layee</li> <li>Type</li> <li>Dep</li> <li>Remarks:</li> </ul>	elow Dark Surf Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Thick Dark S Sandy Muck Sandy Gleye Sandy Redo: Stripped Ma Dark Surface <sup>3</sup> Indicators of hy Restrictive Laye Dep Remarks:	Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
<ul> <li>Sandy Mucky</li> <li>Sandy Gleye</li> <li>Sandy Redox</li> <li>Stripped Ma</li> <li>Dark Surface</li> <li>Indicators of hy</li> <li>Restrictive Layee</li> <li>Type</li> <li>Dep</li> <li>Remarks:</li> </ul>	ky Mineral (S1) ed Matrix (S4) ox (S5) atrix (S6)
Sandy Gleye Sandy Redo: Stripped Ma Dark Surface <sup>3</sup> Indicators of hy Restrictive Laye Dep Remarks:	ed Matrix (S4) ox (S5) atrix (S6)
Sandy Redo: Stripped Ma Dark Surface <sup>3</sup> Indicators of hy Restrictive Layer Dep Remarks:	ox (S5) atrix (S6)
Stripped Ma Dark Surface <sup>3</sup> Indicators of hy Restrictive Layer Type Dep Remarks:	atrix (S6)
Dark Surface <sup>3</sup> Indicators of hy Restrictive Layer Type Dep Remarks:	
<sup>3</sup> Indicators of hy Restrictive Laye Type Dep Remarks:	Le(37) (LINK K, F
Restrictive Layer Type Dep Remarks:	
Type Dep Remarks:	ydrophytic veg
Dep Remarks:	er (if observed)
Remarks:	be:
Remarks:	oth (inches):
	(

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mont	gomery County		Sampling Date:	2021-Aug-19
Applicant/Owner: S	unEast				State: NY		Sampling Point: V	V-KCF-08_PSS-1
Investigator(s): Kevi	n Ferguson, B	rian Corrigan		Sec	tion, Township, Ra	nge: N/	4	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave, convex,	none):	Concave	Slope (%): 2 to 5
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8848124855	Long:	-74.4994768035	Datum: WGS84
Soil Map Unit Name:	Lansing silt l	oam, LaC - 8-15 <sup>0</sup>	% slopes				NWI classific	ation: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remar	·ks.)
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	-	•			ances" present? y answers in Rema	Yes 🟒 No arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-KCF-08
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PSS. Area is wetland, all three w	vetland parameters are pr	resent.	

Wetland Hydrology Indicators:					
Primary Indicators (minimum of o	ne is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)	
		ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) red Rhizospheres on Living F nce of Reduced Iron (C4) t Iron Reduction in Tilled So Auck Surface (C7)		<ul> <li> Surface Soil Cracks (B6)</li> <li> Drainage Patterns (B10)</li> <li> Moss Trim Lines (B16)</li> <li> Dry-Season Water Table (C2)</li> <li> Crayfish Burrows (C8)</li> <li> Saturation Visible on Aerial Imagery (C9)</li> <li> Stunted or Stressed Plants (D1)</li> <li> Geomorphic Position (D2)</li> <li> Shallow Aquitard (D3)</li> <li> Microtopographic Relief (D4)</li> <li> FAC-Neutral Test (D5)</li> </ul>	
Field Observations: Surface Water Present?	Yes No _	Depth (inches):			
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes _ No	
Saturation Present?	Yes 🟒 No	Depth (inches):	0	_	
(includes capillary fringe)					
Describe Recorded Data (stream g Remarks: The criterion for wetland hydrolog				available: ved (primary and secondary indicators were present)	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-08\_PSS-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test workshe	eet:		
	% Cover	Species?	Status	Number of Dominant Sp	ecies That	4	(A)
				Are OBL, FACW, or FAC:			
2.				Total Number of Domina	ant Species	4	(B)
3.				Across All Strata:		•	
				Percent of Dominant Spe	ecies That	100	(A/B)
		·		Are OBL, FACW, or FAC:		100	(////
				Prevalence Index worksh	neet:		
7				Total % Cover o	<u>f:</u>	<u>Multiply</u>	<u>By:</u>
·				OBL species	5	x 1 =	5
	0	= Total Cov	er	FACW species	35	x 2 =	70
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	40	x 3 =	120
. Lonicera hirsuta	20	Yes	FAC	FACU species	0	x 4 =	0
2. Rhamnus cathartica	10	Yes	FAC	UPL species	0	x 5 =	0
3. <u>Nyssa sylvatica</u>	10	Yes	FAC	Column Totals	80	(A)	195 (B)
4.						2.4	195 (0)
5				Prevalence Ind			
j.		······································		Hydrophytic Vegetation			
·				1- Rapid Test for Hy	/drophytic V	egetation	
·	40	= Total Cov	er	2 - Dominance Test	is >50%		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )		-		3 - Prevalence Inde	x is $\leq 3.0^1$		
1. Onoclea sensibilis	30	Yes	FACW	4 - Morphological A	daptations <sup>1</sup>	(Provide	supporting
				data in Remarks or on a	separate sh	eet)	
2. Typha latifolia	5	No	OBL	Problematic Hydro	phytic Veget	ation <sup>1</sup> (Ex	plain)
3. Impatiens capensis	5	No	FACW	<sup>1</sup> Indicators of hydric soil	and wetland	d hydrolog	gy must be
4				present, unless disturbe	d or probler	natic	
		·		Definitions of Vegetation	Strata:		
5				Tree – Woody plants 3 in	. (7.6 cm) or	more in o	liameter a
7				breast height (DBH), rega	ardless of he	eight.	
3.				Sapling/shrub - Woody p	olants less th	nan 3 in. D	BH and
).		<u> </u>		greater than or equal to	3.28 ft (1 m)	) tall.	
10.				Herb – All herbaceous (n	on-woody)	olants, reg	ardless of
11				size, and woody plants le	ess than 3.2	8 ft tall.	
				Woody vines – All woody			28 ft in
12		- Tatal Car		height.	-		
	40	= Total Cov	er	Hydrophytic Vegetation	Present? V	és 🖌 N	0
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )					. resenter 1		~
2							
3							
4.							
	0	= Total Cov	er				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is  $\leq$  3.00).

SOIL

Profile Des	cription: (Describe t	o the d	epth needed to d	locun	nent the i	indicator	or confirm the al	bsence of indicators	.)
Depth	Matrix		Redox						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ture	Remarks
0 - 16	10B 5/1	95	7.5R 5/6	5	C	М	Sandy C	lay Loam	
		·						· · · · ·	
		·							
		·							
		·							
		·						· ·	
		·			<u> </u>			·	
		·							
		·							
		·							
		·							
		. <u> </u>							
<sup>1</sup> Type: C = C	Concentration, D = D	Depleti	on, RM = Reduced	l Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> Lo	ocation: PL = Pore Li	ning, M = Matrix.
Hydric Soil	Indicators:							Indicators for Prot	olematic Hydric Soils³:
Histoso	l (A1)		Polyvalue Be	low S	urface (S	58) <b>(LRR F</b>	R, MLRA 149B)	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	rface	(S9) <b>(LRF</b>	R R, MLRA	A 149B)		edox (A16) <b>(LRR K, L, R)</b>
Black H	istic (A3)		Loamy Muck	y Mir	eral (F1)	(LRR K, L	)		eat or Peat (S3) <b>(LRR K, L, R)</b>
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (S	
	d Layers (A5)		_✓ Depleted Ma						w Surface (S8) <b>(LRR K, L)</b>
	d Below Dark Surfa	ce (A11						Thin Dark Surf	
	ark Surface (A12)		Depleted Da			)			se Masses (F12) <b>(LRR K, L, R)</b>
	lucky Mineral (S1)		Redox Depre	essior	ıs (F8)			-	dplain Soils (F19) <b>(MLRA 149B)</b>
-	Gleyed Matrix (S4)								TA6) (MLRA 144A, 145, 149B)
Sandy F	edox (S5)							Red Parent Ma	
Strippe	d Matrix (S6)								Dark Surface (TF12)
Dark Su	rface (S7) <b>(LRR R, M</b>	LRA 14	9B)					Other (Explain	
3Indicators	of hydrophytic vege	tation	and wotland byd	rolog	v must b	o procop	t unloss disturbo		
-		clation		lolog	y must b	e presen	t, uniess disturbe		
Restrictive	Layer (if observed):		News			1.1	C .: 1 D		
	Туре:		None	-		Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:									
A positive i	ndication of hydric s	soil wa	s observed. The c	riterio	on for hy	dric soil i	s met.		

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mont	gomery Co	unty		Sampling Date:	2021-Aug-19	
Applicant/Owner: S	unEast				State:	New Yor	k :	Sampling Point: <u>W</u>	V-KCF-08_UPL-1	
Investigator(s): Kevi	n Ferguson, B	rian Corrigan		Sec	tion, Towns	ship, Ran	ge: NA	A		
Landform (hillslope, te	rrace, etc.):	Low Hill		Local relie	f (concave,	convex, n	ione):	Convex	Slope (%):	1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat	42.884654	4	Long:	-74.499594	Datum: WG	S84
Soil Map Unit Name:	Lansing silt l	oam, LaC, 8-15%	5 slopes					NWI classifica	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	_(lf no	, explain in Remarl	ks.)	
<b>o</b>		or Hydrology or Hydrology	0	5				ances" present? / answers in Rema	Yes 🟒 No Irks.)	

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
emarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three	e wetland parameters are	e present.							

Wetland Hydrology Indicators:				
Primary Indicators (minimum o	f one is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two required)	
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial</li> <li>Sparsely Vegetated Concave</li> </ul>	Aquat Marl E Hydro Oxidiz Preser Recen Thin M Imagery (B7) Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) Auck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>	
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No _✔ Yes No _✔ Yes No _✔	Depth (inches): Depth (inches): Depth (inches):	 Wetland Hydrology Present? Yes No∠	
(includes capillary fringe)				
Remarks:		erial photos, previous inspections), if		

# VEGETATION -- Use scientific names of plants.

### Sampling Point: W-KCF-08\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	1	
. Pinus strobus	60	Yes	FACU	Are OBL, FACW, or FAC:	I	(A)
. Fraxinus americana	20	Yes	FACU	Total Number of Dominant Species Across All Strata:	8	(B)
	·	·		Percent of Dominant Species That	12.5	(A/B)
		·		Are OBL, FACW, or FAC:		
5		·		Prevalence Index worksheet:		
7.				Total % Cover of:	<u>Multiply B</u>	<u>y:</u>
··	80	= Total Cov		OBL species 0	x 1 =	0
	80		er	FACW species 0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )	45		EA CL	FAC species 15	x 3 =	45
. Fraxinus americana	15	Yes	FACU	FACU species 140	x 4 =	560
2. <u>Rosa multiflora</u>	10	Yes	FACU	UPL species 0	x 5 =	0
3. Lonicera morrowii	10	Yes	FACU	Column Totals 155	(A)	605 (B)
4				Prevalence Index = B/A =		(-)
				Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetation	
				2 - Dominance Test is > 50%		
	35	= Total Cov	er	$3 - Prevalence Index is \leq 3.0^{1}$		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adaptations	<sup>1</sup> (Provide s	upporting
. Fraxinus americana	15	Yes	FACU	data in Remarks or on a separate s		
2. Rubus idaeus	10	Yes	FACU	Problematic Hydrophytic Vege	etation <sup>1</sup> (Exp	olain)
3				<sup>1</sup> Indicators of hydric soil and wetlar	nd hydrolog	y must be
4				present, unless disturbed or proble	matic	
5				Definitions of Vegetation Strata:		
5.				Tree – Woody plants 3 in. (7.6 cm) o	r more in di	iameter a
7.				breast height (DBH), regardless of h		
3.				Sapling/shrub – Woody plants less	than 3 in. Di	3H and
).				greater than or equal to 3.28 ft (1 m	n) tall.	
10				Herb – All herbaceous (non-woody)	plants, rega	ardless of
		·		size, and woody plants less than 3.2	28 ft tall.	
11 12.				Woody vines – All woody vines grea	iter than 3.2	8 ft in
	25	= Total Cov	or	height.		
Noody Vino Stratum (Plot size: 20 ft )		- 10101 CUV		Hydrophytic Vegetation Present?	Yes No	
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )	15	Yes	FAC			
1. <u>Vitis riparia</u>		185	FAC	-		
2				-		
3		·		-		
4				-		
	15	= Total Cov	er			

SOIL

	cription: (Describe	to the c				indicato	r or confirm the a	absence of indicat	ors.)
Depth _	Matrix		Redox						
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 12	10YR 4/3	65	7.5R 5/6	5	C	M	Silty Clay	·	
12 - 20	10YR 5/2	95	7.5R 5/6	5	C	M	Silty Clay	у	
		_							
						·	-		
<sup>1</sup> Type: C = C	Concentration, D =	Depleti	on, RM = Reduced	d Mat	rix. MS =	Maskec	Sand Grains. 2	Location: PL = Por	e Lining, M = Matrix.
Hydric Soil			,		,				Problematic Hydric Soils <sup>3</sup> :
Histoso			Polyvalue Be	low	Surface (	58) (I RR	R, MLRA 149B)		•
	bipedon (A2)		Thin Dark Su						(A10) (LRR K, L, MLRA 149B)
	istic (A3)		Loamy Muck						ie Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye	-				-	y Peat or Peat (S3) <b>(LRR K, L, R)</b>
Stratifie	d Layers (A5)		Depleted Ma						ce (S7) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A1							Below Surface (S8) <b>(LRR K, L)</b> Surface (S9) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Da	rk Su	irface (F7	7)			anese Masses (F12) <b>(LRR K, L, R)</b>
Sandy N	lucky Mineral (S1)		Redox Depre	essio	ns (F8)			-	Floodplain Soils (F19) (MLRA 149B)
Sandy G	Gleyed Matrix (S4)								lic (TA6) (MLRA 144A, 145, 149B)
Sandy F	ledox (S5)								Material (F21)
Stripped	d Matrix (S6)								w Dark Surface (TF12)
Dark Su	rface (S7) <b>(LRR R, N</b>	/ILRA 14	49B)						ain in Remarks)
21	- <b>C</b> have a large the state of							•	
	of hydrophytic veg	-	and wetland hyd	roiog	gy must b	be preser	it, unless disturb	ed or problematic	
Restrictive	Layer (if observed): 						C 11 D (2)		N
	Туре:		None	-		Hydric	Soil Present?	Yes	No⁄_
	Depth (inches):								
Remarks:									
No positive	indication of hydri	ic soils	was observed. Th	e crit	erion for	hydric s	oil is not met.		

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Montg	gomery County		Sampling Date:	2021-Aug-20
Applicant/Owner: S	unEast				State: NY		Sampling Point: <u>N</u>	/-KCF-09_PSS-1
Investigator(s): Kevi	n Ferguson, B	rian Corrigan		Sec	tion, Township, Ra	nge: N/	4	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave, convex,	none):	Concave	Slope (%): 2 to 5
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8869086318	Long:	-74.4963910897	Datum: WGS84
Soil Map Unit Name:	Lansing silt l	oam, LaC, 8-15%	6 slopes				NWI classifica	ation: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remarl	ks.)
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	0	5			ances" present? y answers in Rema	Yes 🟒 No rks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-KCF-09
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PSS. Area is wetland, all three w	vetland parameters are pr	resent.	

Wetland Hydrology Indicators:						
Primary Indicators (minimum o	f one is required; check all f	<u>hat apply)</u>		Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial</li> <li>Sparsely Vegetated Concave</li> </ul>	Aquati Marl D Hydrog Oxidize Presen Recent Thin M Imagery (B7) Other (	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living F ice of Reduced Iron (C4) : Iron Reduction in Tilled So luck Surface (C7) (Explain in Remarks)		<ul> <li> Surface Soil Cracks (B6)</li> <li> Drainage Patterns (B10)</li> <li> Moss Trim Lines (B16)</li> <li> Dry-Season Water Table (C2)</li> <li> Crayfish Burrows (C8)</li> <li> Saturation Visible on Aerial Imagery (C9)</li> <li> Stunted or Stressed Plants (D1)</li> <li> Geomorphic Position (D2)</li> <li> Shallow Aquitard (D3)</li> <li> Microtopographic Relief (D4)</li> <li> FAC-Neutral Test (D5)</li> </ul>		
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No _ <b>/</b> Yes No _ <b>/</b> Yes _ <b>/</b> _ No	Depth (inches): Depth (inches): Depth (inches):	0	_ _ Wetland Hydrology Present? Yes _∠_ No _		
(includes capillary fringe) Describe Recorded Data (stread	n gauge, monitoring well, a	erial photos, previous inspo	ections), if	available:		
Remarks: The criterion for wetland hydro	logy is met. A positive indic	ation of wetland hydrology	was obse	rved (primary and secondary indicators were present)		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-09\_PSS-1

<u>Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That	4	(4)
raxinus pennsylvanica	10	Yes	FACW	Are OBL, FACW, or FAC:	4	(A)
				Total Number of Dominant Species Across All Strata:	5	(B)
				<ul> <li>Percent of Dominant Species That</li> <li>Are OBL, FACW, or FAC:</li> </ul>	80	(A/B)
				Prevalence Index worksheet:		
				Total % Cover of:	<u>Multiply</u>	By:
				OBL species 0	x 1 =	0
	10	= Total Cov	er	FACW species 80	x 2 =	160
ing/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 55	x 3 =	165
Phamnus cathartica	40	Yes	FAC	- FACU species 15	x 4 =	60
raxinus pennsylvanica	10	No	FACW	- UPL species 0	x 5 =	0
Posa multiflora	10	No	FACU	- Column Totals 150	(A)	385 (B)
						202 (B)
				Prevalence Index = B/A =	2.6	
				Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetation	
	60	= Total Cov	er	2 - Dominance Test is >50%		
<u>) Stratum (Plot size: _5 ft _)</u>		-		$\checkmark$ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>		
mpatiens capensis	60	Yes	FACW	4 - Morphological Adaptations	-	supporting
Irtica dioica	10	No	FAC	data in Remarks or on a separate s		
	10	NO	FAC	- Problematic Hydrophytic Vege		
				<sup>1</sup> Indicators of hydric soil and wetlar		gy must be
				present, unless disturbed or proble	matic	
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) o		diameter a
				breast height (DBH), regardless of h	0	
				Sapling/shrub – Woody plants less		OBH and
				greater than or equal to 3.28 ft (1 m		
				Herb – All herbaceous (non-woody)		gardless of
				size, and woody plants less than 3.2		20.6
				Woody vines – All woody vines grea	ter than 3.	.28 ft in
	70	= Total Cov	er	height.		
<u>dy Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 N	lo
Parthenocissus quinquefolia	5	Yes	FACU			
itis riparia	5	Yes	FAC			
				-		
				-		
	10	= Total Cov	or	•		
'itis riparia		Yes = Total Cov		-		

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

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is  $\leq$  3.00).

SOIL

Profile Desc	cription: (Describe t	o the o	depth needed to c	locun	nent the	indicator	r or confirm the a	absence of indicato	rs.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks
0 - 10	10B 4/1	95	7.5R 5/6	5	C	М	Silty Cla	ay Loam	
10 - 20	10B 5/1	90	7.5R 5/6	10	С	М		ay Loam	
		. <u> </u>						<u> </u>	
-		·		—					
		·		—					
		· —							
		· —							
-									
-									
-									
-									
-									
-									
<sup>1</sup> Type: C = C	Concentration, D =	Depleti	ion, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. 2	Location: PL = Pore	Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pr	oblematic Hydric Soils³:
Histosol			Polyvalue Be	low S	urface (S	58) <b>(LRR I</b>	R, MLRA 149B)	2 cm Muck (/	A10) (LRR K, L, MLRA 149B)
Histic Ep	bipedon (A2)		Thin Dark Su						Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Muck						Peat or Peat (S3) <b>(LRR K, L, R)</b>
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)				(S7) (LRR K, L)
Stratifie	d Layers (A5)		_ ∠ Depleted Ma	atrix (l	-3)				low Surface (S8) <b>(LRR K, L)</b>
Deplete	d Below Dark Surfa	ice (A1	1) Redox Dark	Surfa	ce (F6)			,	rface (S9) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Da	rk Su	face (F7	)			lese Masses (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)		Redox Depre	essior	ns (F8)			0	podplain Soils (F19) <b>(MLRA 149B)</b>
Sandy G	leyed Matrix (S4)								: (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)							Red Parent N	
Stripped	d Matrix (S6)								Dark Surface (TF12)
Dark Su	rface (S7) <b>(LRR R, N</b>	ILRA 14	49B)					Other (Explai	
21	- <b>C</b> have a lage at the second						4	-	in in Kemarksy
	of hydrophytic veg	etatior	i and wetland hyd	rolog	y must b	e presen	it, uniess disturb	ed or problematic.	
	_ayer (if observed):						c 11 p (c)		
	Туре:		None			Hydric	Soil Present?	,	/es No
	Depth (inches):								
Remarks:									
A positive ir	ndication of hydric	soil wa	is observed. The c	riterio	on for hy	dric soil	is met.		

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-20
Applicant/Owner: SunEast	State: New York	Sampling Point: W-KCF-09_UPL-1
Investigator(s): Kevin Ferguson, Brian Corrigan	Section, Township, Range:	NA
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none	e): Concave Slope (%): 1 to 3
Subregion (LRR or MLRA): LRR L	Lat: 42.886962 Lon	g: -74.496339 Datum: WGS84
Soil Map Unit Name: Lansing silt loam, LaC, 8-15	6 slopes	NWI classification: None
Are climatic/hydrologic conditions on the site typica	I for this time of year? Yes 🟒 No (If	no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal Circun	nstances" present? Yes 🟒 No
Are Vegetation, Soil, or Hydrology _	naturally problematic? (If needed, explain	any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL. Area is upland, not all	three wetland parameters a	are present.	

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	ne is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Sumption</li> </ul>	Aquat Marl E Hydro Oxidiz Presei Recen Thin N agery (B7) Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) red Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) Auck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No _✔ Yes No _✔ Yes No _✔	Depth (inches): Depth (inches): Depth (inches):	_ 
(includes capillary fringe) Describe Recorded Data (stream g	gauge, monitoring well, a	aerial photos, previous inspections), il	f available:
Remarks: The criterion for wetland hydrolog	ty is not met. No positive	e indication of wetland hydrology was	s observed.

### VEGETATION -- Use scientific names of plants.

### Sampling Point: W-KCF-09\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	4	(4)		
. Rhus aromatica	30	Yes	UPL	Are OBL, FACW, or FAC:		(A)		
. Acer negundo	10	Yes	FAC	Total Number of Dominant Species	7	(B)		
. Prunus serotina	5	No	FACU	Across All Strata:		(2)		
				Percent of Dominant Species That	57.1	(A/B)		
j		. <u> </u>		Are OBL, FACW, or FAC:				
				Prevalence Index worksheet:		_		
				- <u>Total % Cover of:</u>	Multiply I			
	45	= Total Cov	er	- OBL species 0	x1=	0		
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FACW species 25	x 2 =	50		
. Lonicera morrowii	15	Yes	FACU	FAC species <u>30</u>	x 3 =	90		
2. Acer negundo	5	Yes	FAC	FACU species 70	x 4 =	280		
				UPL species <u>30</u>	x 5 =	150		
				- Column Totals 155	(A)	570 (B)		
· · · · · · · · · · · · · · · · · · ·		<u> </u>		Prevalence Index = B/A =	3.7			
				Hydrophytic Vegetation Indicators:				
				1- Rapid Test for Hydrophytic	Vegetation			
·		Tabal Car		2 - Dominance Test is >50%				
	20	= Total Cov	er	3 - Prevalence Index is ≤ $3.0^1$				
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )	40		FACU	4 - Morphological Adaptations	<sup>1</sup> (Provide s	supporting		
. Solidago canadensis	40	Yes	FACU	data in Remarks or on a separate sheet)				
2. Impatiens capensis	25	Yes	FACW	Problematic Hydrophytic Vege	etation <sup>1</sup> (Ex	•		
3. <u>Rubus idaeus</u>	10	No	FACU	<sup>1</sup> Indicators of hydric soil and wetlar	nd hydrolog	gy must be		
1				present, unless disturbed or proble	matic			
				Definitions of Vegetation Strata:				
				Tree – Woody plants 3 in. (7.6 cm) o	r more in d	liameter a		
7				breast height (DBH), regardless of h	neight.			
3				Sapling/shrub – Woody plants less		BH and		
				greater than or equal to 3.28 ft (1 m				
0				Herb – All herbaceous (non-woody)		ardless of		
1				size, and woody plants less than 3.2				
2				Woody vines – All woody vines grea	iter than 3.	28 ft in		
	75	= Total Cov	er	height.				
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 N	0		
1. Vitis riparia	15	Yes	FAC					
				-				
3.				-				
4.				-				
	15	= Total Cov	er	-				
		-						

SOIL

(inches) Color (moist)	%	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	- Texture	Remarks
0 - 20 10YR 5/3	100			Silty Clay	
-					
-					
-					
-					
-					
-					
-					
-					
-					
-					
Type: C = Concentration, D =	Depletion,	RM = Reduced Mat	trix, MS = Maske	d Sand Grains. <sup>2</sup> Lo	ocation: PL = Pore Lining, M = Matrix.
lydric Soil Indicators:					Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	_	_ Polyvalue Below S	Surface (S8) <b>(LR</b> l	R R, MLRA 149B)	2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
Histic Epipedon (A2)		_ Thin Dark Surface	e (S9) <b>(LRR R, ML</b>	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3)		_ Loamy Mucky Mir		, L)	5 cm Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b>
Hydrogen Sulfide (A4)		_ Loamy Gleyed Ma			Dark Surface (S7) <b>(LRR K, L)</b>
Stratified Layers (A5) Depleted Below Dark Surf		_ Depleted Matrix (			Polyvalue Below Surface (S8) (LRR K, L)
Thick Dark Surface (A12)	ace (ATT)	_ Depleted Dark Suna			Thin Dark Surface (S9) (LRR K, L)
Sandy Mucky Mineral (S1)		_ Redox Depression			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4)					Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Redox (S5)					Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6)					Red Parent Material (F21)
Dark Surface (S7) (LRR R, N	MLRA 149B	)			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Indicators of hydrophytic veg		d wetland hydrolog	gy must be pres	ent, unless disturbe	d or problematic.
estrictive Layer (if observed)	•				
Туре:		None	Hydr	ic Soil Present?	Yes No 🟒
Depth (inches):					
lemarks: lo positive indication of hydr	ic soils was	s observed. The crit	erion for hydric	soil is not met.	

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Cree	k Solar Project		City/County:	Sprakers, Mo	ntgomery Co	unty	Sampling Date:	: 2021-Aug-20	
Applicant/Owner: S	unEast				State:	NY	Sampling Point:	W-KCF-10_PEM-1	
Investigator(s): Kevi	n Ferguson, Bı	ian Corrigan		S	ection, Town	ship, Range:	NA		
Landform (hillslope, te	rrace, etc.):	Swale		Local rel	ief (concave,	convex, none	: Concave	Slope (%): 2 to 5	
Subregion (LRR or MLF	RA): LRR	-		Lá	at: 42.88856	4 Long	<b>g:</b> -74.498433	Datum: WGS84	
Soil Map Unit Name:	Lansing silt l	oam, LaC, 8-15%	6 slopes				NWI classifi	cation: None	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)									
<b>o</b>		or Hydrology or Hydrology	0	5			istances" present? any answers in Rem		

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-KCF-10
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PEM. Area is wetland, all three	wetland parameters are p	resent.	

Wetland Hydrology Indicators:				
Primary Indicators (minimum o	of one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)
<ul> <li>✓ Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>✓ Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aeria</li> <li>Sparsely Vegetated Concav</li> </ul>	— Aquati — Marl E — Hydro — Oxidiz _ Preser — Recen — Thin M I Imagery (B7) — Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) red Rhizospheres on Living nce of Reduced Iron (C4) it Iron Reduction in Tilled So Auck Surface (C7) (Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes 🟒 No	Depth (inches):	1	_
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes _ No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				-
Describe Recorded Data (strea				
The criterion for wetland hydro	logy is met. A positive indic	cauon of wetland hydrology	y was obsei	rved (primary and secondary indicators were present)

VEGETATION -- Use scientific names of plants.

#### Sampling Point: W-KCF-10\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test works			
1.	% Cover	Species?	Status	_ Number of Dominant S Are OBL, FACW, or FAC	•	1	(A)
		<u> </u>		Total Number of Domin			
2	·	·		Across All Strata:		1	(B)
	·	·		Percent of Dominant S	pecies That	100	(A (D)
4				Are OBL, FACW, or FAC		100	(A/B)
5				- Prevalence Index work	sheet:		
6				- <u>Total % Cover</u>	of:	<u>Multiply</u>	<u>By:</u>
7				– OBL species	5	x 1 =	5
	0	= Total Cov	er	FACW species	105	x 2 =	210
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
1				– FACU species	5	x 4 =	20
2				UPL species	0	x 5 =	0
3				– Column Totals	115	(A)	235 (B)
4				Prevalence Ir	ndex = B/A =	2	<u>.</u>
5				- Hydrophytic Vegetation	n Indicators:		
6				- 1- Rapid Test for H		/egetation	
7				- 2 - Dominance Te		egetation	
	0	= Total Cov	er	2 Dominance ne			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological		Provide	sunnorting
1. <i>Phragmites australis</i>	100	Yes	FACW	- data in Remarks or on	•		5666661110
2. <i>Symplocarpus foetidus</i>	5	No	OBL	Problematic Hydr	•		plain)
3. <i>Rubus idaeus</i>	5	No	FACU	<sup>1</sup> Indicators of hydric so			
4. Impatiens capensis	5	No	FACW	present, unless disturb			
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	r more in o	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub - Woody	/ plants less tl	han 3 in. [	OBH and
9.				greater than or equal t	o 3.28 ft (1 m	) tall.	
10				Herb – All herbaceous			gardless of
11				size, and woody plants			
12.				Woody vines – All wood	dy vines great	ter than 3	.28 ft in
	115	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetatio	n Present?	/es 🟒 N	lo
1							
2.				-			
3.				-			
4.				-			
	0	= Total Cov	er	-			
		-	<b>.</b> .				

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

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is  $\leq$  3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

### SOIL

Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type!       Loc²       Texture       Remarks         0 - 12       10B 5/1       90       7.5R 5/6       10       C       M       Silty Clay	)
//pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix.         //pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix.         //pric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR K, L)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)        Stratified Layers (A5)      / Depleted Matrix (F3)	)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleved Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleved Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	)
Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	)
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histosol (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       ✓ Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA	)
Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (R10) (LRR K, L, P)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L, R)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Iron-Manganese Masses (F12) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLRA	)
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       S cm Mucky Peat or Peat (S3) (LRR K, L, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       S cm Mucky Peat or Peat (S3) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Iron-Manganese Masses (F12) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLRA K, L)	
Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Opeleted Matrix (F3)       Polyvalue Below Surface (S7) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLRA	_, . ,
Stratified Layers (A5) <ul> <li>             Depleted Matrix (F3)</li> <li>             Depleted Below Dark Surface (A11)</li> <li>             Redox Dark Surface (F6)</li> <li>             Thin Dark Surface (S9) (LRR K, L)</li> <li>             Depleted Dark Surface (F7)</li> <li>             Sandy Mucky Mineral (S1)</li> <li>             Redox Depressions (F8)</li> <li>             Piedmont Floodplain Soils (F19) (MLRA Surface (F9))</li> </ul>	
Thick Dark Surface (A12)	L)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, I Sandy Gleved Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA	
Sandy Gleved Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA	, L, R)
Salluy Gleyeu Matrix (S4)	A 149B)
Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Sandy Redox (S5) Ded Depart Material (S24)	149B)
Stripped Matrix (S6)	
Dark Surface (C7) (I DD D MI DA 1400)	
Other (Explain in Remarks)	
dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
strictive Layer (if observed):	
Type:None Hydric Soil Present? Yes _∠_ No	
Depth (inches):	

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mont	gomery Co	unty		Sampling Date:	2021-Aug-20	
Applicant/Owner: S	unEast				State:	New Yo	rk	Sampling Point: V	V-KCF-10_UPL-1	
Investigator(s): Kevi	n Ferguson, B	rian Corrigan		Sec	tion, Towns	ship, Ran	ige: NA	Ą		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relie	f (concave,	convex, i	none):	Concave	Slope (%): 1	to 3
Subregion (LRR or MLF	RA): LRR	L		Lat	42.888532	23	Long:	-74.4986099	Datum: WGS	584
Soil Map Unit Name:	Lansing silt l	oam, LaC, 8-15%	6 slopes					NWI classifica	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	_ (If no	, explain in Remar	ks.)	
<b>o</b>		or Hydrology or Hydrology	0	5				ances" present? y answers in Rema	Yes 🟒 No arks.)	

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒			
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒	
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate report)				
Covertype is UPL. Area is upland, not all three wetland parameters are present.				

Wetland Hydrology Indicators:			
Primary Indicators (minimum o	f one is required; check all that apply)	Secondary Indicators (minimum of two required)	
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial</li> <li>Sparsely Vegetated Concave</li> </ul>		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>	
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No       Depth (inches):         Yes No       Depth (inches):         Yes No       Depth (inches):	Wetland Hydrology Present? Yes No	
(includes capillary fringe)			
Remarks:	n gauge, monitoring well, aerial photos, previous inspections), i	f available:	
The criterion for wetland hydro	logy is not met. No positive indication of wetland hydrology wa	s observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-10\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test works			
	% Cover	Species?	Status	Number of Dominant S		0	(A)
. Acer saccharum	60	Yes	FACU	Are OBL, FACW, or FAC			
2				Total Number of Domin	hant Species	5	(B)
3.				Across All Strata:			
4.				Percent of Dominant S		0	(A/B)
5.				Are OBL, FACW, or FAC			
				Prevalence Index work			
o 7.				<u>Total % Cover</u>	<u>of:</u>	<u>Multiply</u>	<u>By:</u>
·	60	= Total Cov	or	OBL species	0	x 1 =	0
Contine/Church Stratum (Distaires 15 ft )	00		ei	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )	10		54.611	FAC species	10	x 3 =	30
1. <i>Lonicera morrowii</i>	10	Yes	FACU	FACU species	135	x 4 =	540
2				UPL species	0	x 5 =	0
3				Column Totals	145	(A)	570 (B
4				Prevalence Ir		3.9	
5							
5				Hydrophytic Vegetation			
7.				1- Rapid Test for H		egetation	
	10	= Total Cov	er	2 - Dominance Te			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )		-		3 - Prevalence Ind			
1. Solidago canadensis	20	Yes	FACU	4 - Morphological		-	supportin
2. Parthenocissus quinquefolia	20	Yes	FACU	data in Remarks or on		-	
3. Urtica dioica	10	No	FAC	Problematic Hydr			
4. Rubus idaeus	10	No	FACU	<sup>1</sup> Indicators of hydric so		5	gy must b
5.			17.00	present, unless disturb		natic	
				Definitions of Vegetation			
		<u> </u>		Tree – Woody plants 3			diameter a
7				breast height (DBH), re	•	-	
8		<u> </u>		Sapling/shrub – Woody	-		JBH and
9				greater than or equal t			
10				Herb – All herbaceous			gardiess o
11				size, and woody plants			20 4 1-
12				Woody vines – All wood	ay vines great	er than 3	28 TT IN
	60	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetatio	n Present?	′es N	lo 🔟
1. Parthenocissus quinquefolia	15	Yes	FACU				
2.							
4		- Total Carr	or				
	15	= Total Cov	er				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC- or drier).

SOIL

0.12       10YR 5/3       100       Silty Clay         Silty Clay       Silty Clay	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Loamy Clepressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Loamy Clepressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Loamy Clepressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)	
<ul> <li>Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</li> <li>Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B)</li> <li>Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L)</li> <li>Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)</li> <li>Stratified Layers (A5) Depleted Matrix (F3)</li> <li>Depleted Below Dark Surface (A11) Redox Dark Surface (F6)</li> <li>Thick Dark Surface (A12) Depleted Dark Surface (F7)</li> <li>Sandy Mucky Mineral (S1) Redox Depressions (F8)</li> <li> Sandy Gleyed Matrix (S4)</li> </ul>	
<ul> <li>Histosol (A1)</li> <li>Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</li> <li>Histic Epipedon (A2)</li> <li>Thin Dark Surface (S9) (LRR R, MLRA 149B)</li> <li>Black Histic (A3)</li> <li>Loamy Mucky Mineral (F1) (LRR K, L)</li> <li>Hydrogen Sulfide (A4)</li> <li>Loamy Gleyed Matrix (F2)</li> <li>Stratified Layers (A5)</li> <li>Depleted Matrix (F3)</li> <li>Depleted Below Dark Surface (A11)</li> <li>Redox Dark Surface (F6)</li> <li>Thick Dark Surface (A12)</li> <li>Sandy Mucky Mineral (S1)</li> <li>Redox Depressions (F8)</li> <li>Sandy Gleyed Matrix (S4)</li> </ul>	
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L, R         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLRA 1	
	R)
<ul> <li>Depleted Below Dark Surface (A11) Redox Dark Surface (F6)</li> <li>Thick Dark Surface (A12) Depleted Dark Surface (F7)</li> <li>Sandy Mucky Mineral (S1) Redox Depressions (F8)</li> <li>Sandy Gleved Matrix (S4)</li> </ul>	
Thick Dark Surface (A12)Depleted Dark Surface (F7)Sandy Mucky Mineral (S1)Redox Depressions (F8)Piedmont Floodplain Soils (F19) ( <b>LRR K, L,</b> Piedmont Floodplain Soils (F19) ( <b>MLRA 1</b>	
Sandy Mucky Mineral (S1)Redox Depressions (F8)Iron-Manganese Masses (F12) (LRR K, L, Sandy Gleved Matrix (S4)Piedmont Floodplain Soils (F19) (MLRA 1	
Sandy Gleved Matrix (S4)	
Masic Spadic (TAG) (MI DA 144A 14E 140	
Sandy Redox (S5)	9B)
Stripped Matrix (S6) Red Parent Material (F21) Very Shallow Dark Surface (TF12)	
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	
Andicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Restrictive Layer (if observed):	
Type: None Hydric Soil Present? Yes No 🖌	
Depth (inches): Remarks:	

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-20
Applicant/Owner: SunEast	State: NY	Sampling Point: W-KCF-11_PEM-1
Investigator(s): Kevin Ferguson, Brian Corrig	gan Section, Township, Rang	e: NA
Landform (hillslope, terrace, etc.): Depres	sion Local relief (concave, convex, no	Slope (%):         2 to 5
Subregion (LRR or MLRA): LRR L	Lat: 42.8890773235 L	ong: -74.5004537144 Datum: WGS84
Soil Map Unit Name: Rock outcrop-Farming	ton association, RLF, very steep	NWI classification: None
Are climatic/hydrologic conditions on the site	ypical for this time of year? Yes _∠_ No	(lf no, explain in Remarks.)
· ,	<u> </u>	umstances" present? Yes 🖌 No in any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-KCF-11
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PEM. Area is wetland, all three v	wetland parameters are p	resent.	

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of o	ne is required; check all t	<u>that apply)</u>		Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Surface</li> </ul>	Aquati Marl D Hydrog Oxidize Presen Recent Thin M nagery (B7) Other (	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living ice of Reduced Iron (C4) : Iron Reduction in Tilled So luck Surface (C7) (Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations: Surface Water Present?	Yes 🏒 No	Depth (inches):	1	
Water Table Present?	Yes No	Depth (inches):		– Wetland Hydrology Present? Yes _≁_ №
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stream g Remarks: The criterion for wetland hydrolog				available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-11\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test workshe	et:		
	% Cover	Species?	Status	Number of Dominant Spe	ecies That	2	(A)
				Are OBL, FACW, or FAC:		-	(~)
		<u> </u>		Total Number of Domina	nt Species	3	(B)
3.				Across All Strata:		5	(D)
		·		Percent of Dominant Spe	cies That	66.7	
				Are OBL, FACW, or FAC:		00.7	(A/B)
5		·		Prevalence Index worksh	eet:		
5		·		Total % Cover of	<u>.</u>	Multiply B	<u>By:</u>
7				OBL species	0	x 1 =	0
	0	= Total Cov	er	FACW species	30	x 2 =	60
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	10	x 3 =	30
1. <i>Hamamelis virginiana</i>	10	Yes	FACU	FACU species	10	x 4 =	40
2.				UPL species	0		40
3					-	x 5 =	-
4.				Column Totals	50	(A)	130 (B)
				Prevalence Inde	ex = B/A =	2.6	
				Hydrophytic Vegetation I	ndicators:		
				1- Rapid Test for Hy	drophytic V	egetation	
7				2 - Dominance Test	is >50%		
	10	= Total Cov	er	_✓_ 3 - Prevalence Index	is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological A	daptations <sup>1</sup>	(Provide s	upportin
1. Impatiens capensis	30	Yes	FACW	data in Remarks or on a s	•	-	
2. <i>Urtica dioica</i>	10	Yes	FAC	Problematic Hydrop			olain)
3				<sup>1</sup> Indicators of hydric soil a			
4				present, unless disturbed		, ,	
5.				Definitions of Vegetation			
6.				Tree – Woody plants 3 in.		more in d	ismotor :
7				breast height (DBH), rega			lameter e
8.		·		Sapling/shrub – Woody p		-	BH and
9.				greater than or equal to 3			Dirana
		<u> </u>		Herb – All herbaceous (no			ardlass
10		·		size, and woody plants le		. 0	ai aic55 0
11				Woody vines – All woody			08 ft in
12				height.	villes great		201111
		= Total Cov	er				
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation	Present? Y	es 🟒 N	0
1							
ר ר							
		· ·					
3 4.				•			
+		Tatal C					
	0	= Total Cov	er				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is  $\leq$  3.00).

## SOIL

Depth (inches)	Matrix		Redox	Featu	ires		absence of indicators.)
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup> Texture	e Remarks
0 - 14	10B 5/1	85	7.5R 5/6	15	<u>с горе</u>	M Silty Cla	
0 11	100 3/1		7.51( 5/ 6				<u> </u>
				· —			
				· <u> </u>	<u> </u>		
				·			
				·			
				. <u> </u>			
/ne: ( = (	oncentration D =	 Denlet	ion RM = Reduce	d Matr	ix MS =	Masked Sand Grains.	<sup>2</sup> Location: PL = Pore Lining, M = Matrix.
	Indicators:	Depier			17, 1915		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue B		urfaco (S	8) (LRR R, MLRA 149B)	•
-	bipedon (A2)		•			R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Hi			Loamy Mucl				Coast Prairie Redox (A16) (LRR K, L, R)
-	en Sulfide (A4)		Loamy Gley	-			5 cm Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b>
, ,	d Layers (A5)		Depleted Ma				Dark Surface (S7) <b>(LRR K, L)</b>
	d Below Dark Surfa	ace (A1					Polyvalue Below Surface (S8) <b>(LRR K, L)</b>
•	ark Surface (A12)		Depleted Da				Thin Dark Surface (S9) (LRR K, L)
-	lucky Mineral (S1)		Redox Depr				Iron-Manganese Masses (F12) <b>(LRR K, L, R)</b>
	Gleyed Matrix (S4)						Piedmont Floodplain Soils (F19) <b>(MLRA 149B)</b>
	Redox (S5)						Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
	d Matrix (S6)						Red Parent Material (F21)
	rface (S7) <b>(LRR R, N</b>						Very Shallow Dark Surface (TF12)
			49D)				Other (Explain in Remarks)
	of hydrophytic veg	etatior	n and wetland hyd	Irology	must be	e present, unless disturl	ped or problematic.
idicators	, , , , ,						
	Layer (if observed):					Hydric Soil Present?	Yes 🟒 No
strictive L			None			-	
strictive l	Layer (if observed):		None				
strictive L marks:	Layer (if observed): Type: Depth (inches):				n for hur		
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riterio	n for hyd	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			criteric	n for hyd	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyo	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal (	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyc	dric soil is met. Refusal o	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyc	dric soil is met. Refusal o	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			criteric	n for hyc	dric soil is met. Refusal o	due to coarse fragments.
estrictive L emarks:	Layer (if observed): Type: Depth (inches):			criteric	n for hyd	dric soil is met. Refusal o	due to coarse fragments.
estrictive L emarks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal o	due to coarse fragments.
estrictive L emarks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal o	due to coarse fragments.
estrictive L emarks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal o	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal o	due to coarse fragments.
strictive L marks:	Layer (if observed): Type: Depth (inches):			riteric	n for hyd	dric soil is met. Refusal o	due to coarse fragments.

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek	Solar Project		City/County: Spra	akers, Montg	omery County	/	Sampling Date:	2021-Aug-20
Applicant/Owner: Su	ınEast				State: Net	w York	Sampling Point: <u>\</u>	N-KCF-11_UPL-1
Investigator(s): Kevin	i Ferguson, Bi	ian Corrigan		Secti	on, Township,	, Range: N	4	
Landform (hillslope, ter	race, etc.):	Hillslope		Local relief (	concave, conv	vex, none):	Concave	Slope (%): 2 to 5
Subregion (LRR or MLR	A): LRR	-		Lat:	42.889216	Long:	-74.500167	Datum: WGS84
Soil Map Unit Name:	Rock outcro	p-Farmington as	sociation, RLF, very	y steep			NWI classific	ation: None
Are climatic/hydrologic	conditions or	n the site typical	for this time of year	ar?	Yes 🟒 No	o (If no	, explain in Remar	rks.)
0		, 0, _	significantly dis naturally probl				ances" present? y answers in Rema	Yes 🟒 No arks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures l	nere or in a separate repor	t)	
Covertype is UPL. Area is upland, not all th	ree wetland parameters ar	e present.	

#### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of	one is required; check all f	<u>that apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial In</li> <li>Sparsely Vegetated Concave S</li> </ul>	— Aquati — Marl D — Hydrog — Oxidize — Preser — Recent — Thin M magery (B7) — Other	Stained Leaves (B9) c Fauna (B13) reposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream	Yes No Yes No Yes No gauge, monitoring well, a	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspections), in	
Remarks: The criterion for wetland hydrolo	ygy is not met. No positive	indication of wetland hydrology was	s observed.

# VEGETATION -- Use scientific names of plants.

## Sampling Point: W-KCF-11\_UPL-1

		Yes Yes Yes	FACU FACU FACU	Are OBL, FACW, or FAC:     1       Total Number of Dominant Species     7       Across All Strata:     7       Percent of Dominant Species That     14.3       Are OBL, FACW, or FAC:     14.3	(A) (B)
. Tsuga canadensis	20			Across All Strata: 7 Percent of Dominant Species That 14.3	_
apling/Shrub Stratum (Plot size:15 ft)		Yes	FACU	Percent of Dominant Species That	_
apling/Shrub Stratum (Plot size: <u>15 ft</u> ) <i>Fagus grandifolia</i>				. 14.3	(
. apling/Shrub Stratum (Plot size: <u>15 ft</u> ) . Fagus grandifolia					(A/B)
<u>apling/Shrub Stratum</u> (Plot size: <u>15 ft</u> ) . <i>Fagus grandifolia</i>				Prevalence Index worksheet:	
a <mark>pling/Shrub Stratum</mark> (Plot size: <u>15 ft</u> ) . <i>Fagus grandifolia</i>	70			Total % Cover of: Multiply By:	
. Fagus grandifolia	/0	Tabal Car		OBL species 0 x 1 =	0
. Fagus grandifolia		= Total Cov	er	FACW species 5 x 2 =	10
	20		FACU	FAC species         25         x 3 =	75
. Acer saccharum	20	Yes	FACU	FACU species 140 x 4 =	560
	10	Yes	FACU	UPL species 0 x 5 =	0
·				Column Totals 170 (A) 64	15 (B)
				Prevalence Index = B/A =3.8	
·				Hydrophytic Vegetation Indicators:	
·				1- Rapid Test for Hydrophytic Vegetation	
·				2 - Dominance Test is > 50%	
	30	= Total Cov	er	$3 - Prevalence Index is \le 3.0^1$	
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adaptations <sup>1</sup> (Provide sup	portin
. Parthenocissus quinquefolia	40	Yes	FACU	data in Remarks or on a separate sheet)	
. Athyrium angustum	15	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explai	n)
. Urtica dioica	10	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology m	nust b
. Impatiens capensis	5	No	FACW	present, unless disturbed or problematic	
				Definitions of Vegetation Strata:	
				Tree – Woody plants 3 in. (7.6 cm) or more in diam	neter a
·				breast height (DBH), regardless of height.	
·				Sapling/shrub – Woody plants less than 3 in. DBH	and
·				greater than or equal to 3.28 ft (1 m) tall.	
0				Herb – All herbaceous (non-woody) plants, regard	lless of
1				size, and woody plants less than 3.28 ft tall.	_
2.				Woody vines – All woody vines greater than 3.28 f	t in
	70	= Total Cov	er	height.	
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present? Yes No	$\checkmark$
· · ·					
	0	= Total Cov	er		

SOIL

Profile Description: (Describe	e to the de	•			ndicator	or confirm the al	osence of indicato	rs.)
Depth Matrix		Redox						
(inches) Color (moist)		Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Text		Remarks
0 - 6 10YR 3/3	100					Silty Cla	y Loam	
·								
-								
-								
-								
-								
-								
-								
·								
<sup>1</sup> Type: C = Concentration, D =	- Doplatic	p PM - Poducod	Mati	iv MC -	Maskod	Sand Grains 21	acation: PL - Pore	Liping M - Matrix
Hydric Soil Indicators:	Depietit	n, nin – neuuceu	widt	- כועו , או	MUSKEU			oblematic Hydric Soils <sup>3</sup> :
Hydric Soli Indicators:		Polyvalue Bel		urfaco (S	ס מן () גע			-
Histosof (AT) Histic Epipedon (A2)		Thin Dark Su						(10) (LRR K, L, MLRA 149B)
Black Histic (A3)		Loamy Mucky						Redox (A16) <b>(LRR K, L, R)</b>
Hydrogen Sulfide (A4)		Loamy Gleye	·			,	,	Peat or Peat (S3) <b>(LRR K, L, R)</b>
Stratified Layers (A5)		Depleted Mat					Dark Surface	
Depleted Below Dark Sur	face (A11	-					•	low Surface (S8) (LRR K, L)
Thick Dark Surface (A12)		Depleted Dar						rface (S9) (LRR K, L)
Sandy Mucky Mineral (S1)	)	Redox Depre	ssior	is (F8)			0	ese Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4)								oodplain Soils (F19) <b>(MLRA 149B)</b>
Sandy Redox (S5)								(TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6)							Red Parent N	
Dark Surface (S7) (LRR R,	MLRA 149	9B)						Dark Surface (TF12)
		,					Other (Explai	n in Remarks)
<sup>3</sup> Indicators of hydrophytic ve	-	and wetland hydr	ology	y must be	e presen	t, unless disturbe	d or problematic.	
Restrictive Layer (if observed	):							
Туре:		None	_		Hydric	Soil Present?		Yes No _
Depth (inches):								
Remarks:								
No positive indication of hyd	ric soils w	as observed. The	e crite	rion for l	nyarıc so	il is not met. Retu	Isal due to coarse	fragments.

Photo of Sample Plot North



Photo of Sample Plot East

Photo of Sample Plot South



Photo of Sample Plot West

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mont	gomery County		Sampling Date:	2021-Aug-20
Applicant/Owner: S	unEast				State: NY		Sampling Point: V	V-KCF-12_PEM-1
Investigator(s): Kevi	n Ferguson, B	rian Corrigan		Sect	tion, Township, Ra	nge: N/	4	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave, convex,	none):	Concave	Slope (%): 2 to 5
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8879645421	Long:	-74.4984039199	Datum: WGS84
Soil Map Unit Name:	Lansing silt l	oam, LaC, 8-15%	6 slopes				NWI classifica	ation: None
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)								
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	0	5			ances" present? y answers in Rema	Yes 🟒 No Irks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No						
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-KCF-12						
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Area is wetland, all three wetland parameters are present.									

# HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of	one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)			
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Saturation (A3)</li> <li>Marl Deposits (B15)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>				<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>			
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _ <b>_/</b> Yes No _ <b>_/</b> Yes _ <b>_/</b> _ No	Depth (inches): Depth (inches): Depth (inches):	6	Wetland Hydrology Present? Yes _∠_ №			
Describe Recorded Data (stream	gauge, monitoring well, a	aerial photos, previous inspe	ections), if	available:			
The criterion for wetland hydrolc	ogy is met. A positive indic	cation of wetland hydrology	was obser	ved (primary and secondary indicators were present).			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-12\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test works	neet:		
	% Cover	Species?	Status	Number of Dominant S		2	(A)
1				Are OBL, FACW, or FAC:			
2				Total Number of Domin	ant Species	2	(B)
3				Across All Strata:			
4				<ul> <li>Percent of Dominant Sp</li> <li>Are OBL, FACW, or FAC:</li> </ul>		100	(A/B)
5		<u> </u>		Prevalence Index works	sheet:		
6		<u> </u>		- <u>Total % Cover</u>	<u>of:</u>	<u>Multiply</u>	By:
7				- OBL species	20	x 1 =	20
	0	= Total Cov	er	FACW species	45	x 2 =	90
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
	·			- FACU species	5	x 4 =	20
2				- UPL species	0	x 5 =	0
				- Column Totals	70	(A)	130 (B)
4				- Prevalence In	dex = B/A =	1.9	
5				- Hydrophytic Vegetation			
6				1- Rapid Test for H		logotation	
7				- 2 - Dominance Tes	5 1 5	egetatioi	1
	0	= Total Cov	er	2 - Dominance res			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological		(Provide	supportin
1. Impatiens capensis	40	Yes	FACW	- data in Remarks or on a		-	Supportin
2. <i>Typha latifolia</i>	20	Yes	OBL	Problematic Hydro	•		(plain)
3. Phalaris arundinacea	5	No	FACW	_ 1Indicators of hydric so			
4. Solidago canadensis	5	No	FACU	present, unless disturb			8) 11051 8
5.				Definitions of Vegetatio			
6.				Tree – Woody plants 3 i		more in	diameter a
7				breast height (DBH), re			
8.		·		Sapling/shrub - Woody	plants less tl	han 3 in. I	DBH and
9.				greater than or equal to	-		
10				- Herb – All herbaceous (	non-woody)	plants, re	gardless o
11				size, and woody plants	less than 3.2	8 ft tall.	
12		<u> </u>		Woody vines – All wood	ly vines great	er than 3	.28 ft in
	70	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: <u>30 ft</u> )	70			Hydrophytic Vegetation	n Present?	/es 🟒 N	No
1.							
	,,	<u> </u>		-			
2		·		-			
3		<u> </u>		-			
4		·		-			
	0	= Total Cov	er				

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

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is  $\leq$  3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

	•	to the d	•			indicator	or confirm the a	bsence of indicators.)
Depth	Matrix		Redo	x Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 8	10YR 4/2	100	10YR 4/1				Silty Clay	
8 - 16	10B 4/1	90	10YR 5/6	10	С	Μ	Silty Clay	
16 - 20	10B 5/1	85	10YR 5/8	15	С	M	Silty Clay	
ype: C = C	Concentration, D =	Depletio	on, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L	.ocation: PL = Pore Lining, M = Matrix.
	Indicators:	1						Indicators for Problematic Hydric Soils <sup>3</sup> :
_ Histoso			Polyvalue Be					2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
- '	oipedon (A2)		Thin Dark Su					Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi			Loamy Muck	-		(LRR K, L	.)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surface (S7) <b>(LRR K, L)</b>
	d Layers (A5)		_✓ Depleted Ma					Polyvalue Below Surface (S8) (LRR K, L)
_ Deplete	d Below Dark Surf	ace (A11	) Redox Dark	Surfa	ce (F6)			Thin Dark Surface (S9) <b>(LRR K, L)</b>
_ Thick Da	ark Surface (A12)		Depleted Da	rk Su	rface (F7)	)		Iron-Manganese Masses (F12) (LRR K, L, R)
_ Sandy N	lucky Mineral (S1)		Redox Depre	essior	is (F8)			
Sandy G	leyed Matrix (S4)							Piedmont Floodplain Soils (F19) (MLRA 149B)
-	edox (S5)							Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	d Matrix (S6)							Red Parent Material (F21)
			<b></b>					Very Shallow Dark Surface (TF12)
_ Dark Su	rface (S7) <b>(LRR R, I</b>	MLRA 14	9B)					Other (Explain in Remarks)
		-	and wetland hyd	rolog	y must b	e presen	t, unless disturbe	ed or problematic.
	_ayer (if observed)	:	News			L barded a	C - 11 Due + 2	
	Туре:		None	-		Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mont	gomery Co	unty		Sampling Date:	2021-Aug-20
Applicant/Owner: S	unEast				State:	New York	k l	Sampling Point: <u>W</u>	-KCF-12_UPL-1
Investigator(s): Kevin	n Ferguson, B	rian Corrigan		Sec	tion, Towns	ship, Rang	ge: NA	Ą	
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relie	f (concave, o	convex, no	one):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLR	RA): LRR	L		Lat	42.888000	01 L	ong:	-74.4986368	Datum: WGS84
Soil Map Unit Name:	Lansing silt	oam, LaC, 8-15%	6 slopes					NWI classifica	tion: None
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🖌	_ No	(If no	, explain in Remark	(S.)
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	0	5				ances" present? y answers in Rema	Yes 🟒 No rks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

#### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of or	ne is required; check all t	<u>hat apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Image Sparsely Vegetated Concave Sume</li> </ul>	0, ,	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _✔ Yes No _✔ Yes No _✔	Depth (inches): Depth (inches): Depth (inches):	 Wetland Hydrology Present? Yes No∠ 
Remarks:		erial photos, previous inspections), i	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-KCF-12\_UPL-1

ree Stratum (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That	1	(A)
Acer saccharum	70	Yes	FACU	Are OBL, FACW, or FAC:		
				Total Number of Dominant Species Across All Strata:	6	(B)
				Percent of Dominant Species That		
		<u> </u>		Are OBL, FACW, or FAC:	16.7	(A/B)
				Prevalence Index worksheet:		
		·		Total % Cover of:	Multiply E	<u>By:</u>
·		- Tatal Cau		OBL species 0	x 1 =	0
- June (Church Church and (Distributed of the Church and	/0	= Total Cov	er	FACW species 0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )	40		EA CH	FAC species 10	x 3 =	30
. Fraxinus americana	10	Yes	FACU	FACU species 130	x 4 =	520
. Carpinus caroliniana	10	Yes	FAC	UPL species 0	x 5 =	0
. <u>Rosa multiflora</u>	5	Yes	FACU	Column Totals 140	(A)	550 (B)
·		· ·		Prevalence Index = B/A =	3.9	
		<u> </u>		Hydrophytic Vegetation Indicators:		
		·		1- Rapid Test for Hydrophytic		
				2 - Dominance Test is > 50%	0	
	25	= Total Cov	er	$3 - Prevalence Index is \le 3.0^1$		
erb Stratum (Plot size: <u>5 ft</u> )				4 - Morphological Adaptation	s <sup>1</sup> (Provide s	upportin
. Solidago canadensis	15	Yes	FACU	data in Remarks or on a separate s	heet)	
. Ageratina altissima	15	Yes	FACU	Problematic Hydrophytic Veg	etation <sup>1</sup> (Exp	olain)
. Fraxinus americana	5	No	FACU	<sup>1</sup> Indicators of hydric soil and wetla	nd hydrolog	y must be
. Phytolacca americana	5	No	FACU	present, unless disturbed or proble	ematic	-
. Parthenocissus quinquefolia	5	No	FACU	Definitions of Vegetation Strata:		
·				Tree – Woody plants 3 in. (7.6 cm) o	or more in d	iameter a
·				breast height (DBH), regardless of	neight.	
				Sapling/shrub – Woody plants less	than 3 in. D	BH and
				greater than or equal to 3.28 ft (1 r	n) tall.	
0.				Herb – All herbaceous (non-woody		ardless of
1				size, and woody plants less than 3.		
2.				Woody vines – All woody vines grea	ater than 3.2	28 ft in
	45	= Total Cov	er	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetation Present?	Yes N	o 🖌
·						
		· ·				
				•		
·	0	= Total Cov	er	•		
		-	Ci i			

SOIL

Color (moist)       %       Color (moist)       %       Type1       Loc2       Texture         0 - 12       10YR 5/3       100	cators.)	absence of indicate	r or confirm the a	indicato			•	the de		
0 - 12       10YR 5/3       100	Deve ender		<b>T</b>	1 2					Matrix	Depth
12 - 20       10YR 5/4       100       Silty Clay         Silty Clay       Silty Clay <t< td=""><td>Remarks</td><td></td><td>-</td><td>LOC<sup>2</sup></td><td>Туреч</td><td></td><td>Color (moist)</td><td></td><td></td><td></td></t<>	Remarks		-	LOC <sup>2</sup>	Туреч		Color (moist)			
Image: Solution of the system of the syst								•		
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent       Very Shallow         Sandy Redox (S5)       Other (Explained Corr (Expla		ty Clay	Silty					100	10YR 5/4	12 - 20
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent       Very Shallow         Sandy Redox (S5)       Other (Explained Corr (Expla										<u> </u>
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent       Very Shallow         Sandy Redox (S5)       Other (Explained Corr (Expla										
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Su         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)       Thin Dark SU         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)       Thin Dark SU         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										······································
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)       Thin Dark SU         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:										······································
Hydric Soil Indicators:       Indicators for P         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F6)       Thin Dark SU         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Iron-Mangai         Sandy Redox (S5)       Red Parent Stripped Matrix (S6)       Very Shallow         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explained Sold Present?)       Other (Explained Sold Present?)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Remarks:	Pore Lining M = Matrix	21 ocation: PL = Pore	Sand Grains 21	Maskod	iv MS =	l Mat	n RM = Reduced	enletio	$P_{\text{partial}} = 0$	$1$ Type: $C = C_{1}$
	· ·			MUSKEU	IA, IVIJ -	ivial	, NW - Neuuceu	cpierio		
	or Problematic Hydric Soils <sup>3</sup> :			·0) /  חח	urface (C	low	Dobaciluo Del			
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface         Stratified Layers (A5)       Depleted Matrix (F3)       Dark Surface         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Si         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Iron-Manga         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont FI         Sandy Redox (S5)       Mesic Spodi       Red Parent         Stripped Matrix (S6)       Very Shallow       Other (Explation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:       None       Hydric Soil Present?         Depth (inches):       Remarks:       Remarks:       Hydric Soil Present?	uck (A10) <b>(LRR K, L, MLRA 149B)</b>								-	
Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)	airie Redox (A16) <b>(LRR K, L, R)</b>									'
Stratified Layers (A5)       Depleted Matrix (F3)       Depleted Surface         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Iron-Manga         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont FI         Sandy Redox (S5)       Mesic Spodi       Red Parent         Stripped Matrix (S6)       Very Shallow       Other (Expla         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Restrictive Layer (if observed):         Type:       None       Hydric Soil Present?         Depth (inches):       Remarks:       Remarks:	ucky Peat or Peat (S3) <b>(LRR K, L, R)</b>		L)			-				
Depleted Below Dark Surface (A11)Redox Dark Surface (F6)Thin Dark Surface (A12)Depleted Dark Surface (F7)Thin Dark Surface (S7)Iron-MangaPiedmont FIMedox Depressions (F8)Piedmont FIMesic SpodiRed ParentMesic SpodiRed ParentNerse Surface (S7) (LRR R, MLRA 149B)Other (Explation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):    Type:NoneHydric Soil Present? Remarks:	rface (S7) <b>(LRR K, L)</b>									
	ie Below Surface (S8) <b>(LRR K, L)</b>	,					-		-	
	rk Surface (S9) <b>(LRR K, L)</b>			)				c (/ /		
Sandy Gleyed Matrix (S4)     Piedmont FI     Mesic Spodi     Sandy Redox (S5)     Red Parent     Stripped Matrix (S6)     Dark Surface (S7) (LRR R, MLRA 149B)     Other (Expla     Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):     Type: None     Depth (inches):  Remarks:	nganese Masses (F12) <b>(LRR K, L, R)</b>	•		, 					, ,	
Sandy Redox (S5)Red Parent : Stripped Matrix (S6) Very Shallow Dark Surface (S7) (LRR R, MLRA 149B)Other (Expla 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:NoneHydric Soil Present? Depth (inches): Remarks:	nt Floodplain Soils (F19) <b>(MLRA 149B)</b>									
Stripped Matrix (S6)Very Shallov Dark Surface (S7) (LRR R, MLRA 149B)Other (Expla 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:NoneHydric Soil Present? Depth (inches): Remarks:	oodic (TA6) <b>(MLRA 144A, 145, 149B)</b>									
Dark Surface (S7) (LRR R, MLRA 149B) Other (Expla 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Depth (inches): Remarks:										-
3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):         Type:       None         Depth (inches):         Remarks:	allow Dark Surface (TF12)	•					P)	DA 1/0		
Restrictive Layer (if observed):     None       Type:     None       Depth (inches):   Remarks:	xplain in Remarks)	Other (Expla					5)			
Type:     None       Depth (inches):     Hydric Soil Present?	atic.	bed or problematic.	nt, unless disturbe	e preser	y must b	rolog	nd wetland hydr	ation a	ydrophytic vege	<sup>3</sup> Indicators c
Depth (inches):     Remarks:									er (if observed):	Restrictive L
Remarks:	Yes No _		: Soil Present?	Hydric			None		e:	٦
Remarks:				5		-				

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek S	solar Project	City/County: Canajoharie, M	Iontgomery County	Sampling Date: 20	22-July-06
Applicant/Owner: Sune	east		State: NY	Sampling Point: W-M	LM-01_PEM-1
Investigator(s): Melanie	e Musarra	Se	ction, Township, Range:		
Landform (hillslope, terra	ace, etc.): Flat	Local relie	ef (concave, convex, none)	: Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA):	MLRA 144A of LRR R	Lat	: 42.8874565 Long	: -74.5495908333	Datum: WGS84
Soil Map Unit Name:N	Ma - Madalin silty clay loam			NWI classificatio	n: None
Are climatic/hydrologic co	onditions on the site typical	for this time of year?	Yes 🟒 No (If r	no, explain in Remarks.)	
ē <u> </u>		significantly disturbed? naturally problematic?	Are "Normal Circum (If needed, explain a	stances" present? iny answers in Remarks	Yes 🟒 No .)
-				-	

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No						
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-MLM-01						
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Area is wetland, all three wetland parameters are present.									

## HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of o	ne is required; check all tha	Secondary Indicators (minimum of two required)			
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Survival</li> </ul>	Aquatic F Marl Dep Hydroge Oxidized Presence Recent Ir Thin Muc agery (B7) Other (Ex	ained Leaves (B9) Fauna (B13) posits (B15) n Sulfide Odor (C1) Rhizospheres on Living Roc e of Reduced Iron (C4) on Reduction in Tilled Soils ck Surface (C7) cplain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>✓ Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>✓ Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>✓ FAC-Neutral Test (D5)</li> </ul>	
Field Observations:					
Surface Water Present?	Yes No 🟒	Depth (inches):		_	
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No	
Saturation Present?	Yes 🟒 No	Depth (inches):	0		
(includes capillary fringe)					
Describe Recorded Data (stream g	gauge, monitoring well, aeri	ial photos, previous inspecti	ions), if	available:	
Remarks:					
The criterion for wetland hydrolog	gy is met.				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-01\_PEM-1

<u> Free Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test work	sheet:		
	% Cover	Species?	Status	Number of Dominant Are OBL, FACW, or FAC	•	2	(A)
				Total Number of Dom			
		·		Across All Strata:	mant species	2	(B)
		·		Percent of Dominant S	Species That	400	
		·		Are OBL, FACW, or FAC		100	(A/B)
		<u> </u>		Prevalence Index work	ksheet:		
		·		Total % Cove	r of:	<u>Multiply</u>	<u>By:</u>
·		= Total Cov	or	- OBL species	90	x 1 =	90
apling/Shrub Stratum (Plot size: <u>15 ft</u> )	0		ei	FACW species	10	x 2 =	20
				FAC species	0	x 3 =	0
				FACU species	0	x 4 =	0
				- UPL species	0	x 5 =	0
		·		Column Totals	100	(A)	110 (B)
·		<u> </u>		Prevalence I	ndex = B/A =	1.1	<u> </u>
				Hydrophytic Vegetatio	n Indicators:		
		·		1- Rapid Test for	Hydrophytic V	egetation	
		Tatal Car		2 - Dominance Te	est is >50%		
	0	= Total Cov	er	3 - Prevalence In	dex is $\leq 3.0^1$		
lerb Stratum (Plot size: <u>5 ft</u> )	50	Vee		4 - Morphologica	l Adaptations <sup>1</sup>	(Provide	supporting
. Lythrum salicaria	50	Yes	OBL	data in Remarks or on	a separate sh	eet)	
. <u>Carex vulpinoidea</u>	20	Yes	OBL	Problematic Hyd	rophytic Veget	tation <sup>1</sup> (Ex	plain)
Scirpus atrovirens	10	No	OBL	<sup>1</sup> Indicators of hydric se			gy must be
. Onoclea sensibilis	10	No	FACW	present, unless distur	bed or probler	matic	
. Typha latifolia	10	No	OBL	Definitions of Vegetati			
		·		Tree – Woody plants 3			diameter a
·		·		breast height (DBH), r			
·		<u> </u>		Sapling/shrub - Wood			OBH and
		<u> </u>		greater than or equal			
0				Herb – All herbaceous size, and woody plants			gardiess of
1		<u> </u>		Woody vines – All woo			28 ft in
2				height.	ay vines great		201111
	100	= Total Cov	er	Hydrophytic Vegetation	on Present?		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )						les <u>v</u> h	
·		<u> </u>					
·		·		.			
				.			
l							
	0	= Total Cov	er				

SOIL

Depth	Matrix		Redox					bsence of indicators.)
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 7	10YR 3/1	100					Clay Loar	n
7 - 14	10YR 3/1	98	2.5YR 6/4	2	С	М	Clay Loar	n
	-							
	-							
vne: ( = (	oncentration D =	Depletic	n RM = Reduced	Mat	rix MS =	Masked Sand	Grains <sup>2</sup>	ocation: PL = Pore Lining, M = Matrix.
	ndicators:		, neudeed				L	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be	low <	urface (S	8) (LRR R. MI	RA 149B)	•
_	oipedon (A2)		Thin Dark Su					2 cm Muck (A10) (LRR K, L, MLRA 149B)
_ Black Hi			Loamy Muck				,	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
_ Hydroge	en Sulfide (A4)		Loamy Gleye					Dark Surface (S7) (LRR K, L)
_ Stratified	d Layers (A5)		Depleted Ma	trix (	F3)			Polyvalue Below Surface (S8) (LRR K, L)
	d Below Dark Surfa	ace (A11						Thin Dark Surface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Dar			)		Iron-Manganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			Piedmont Floodplain Soils (F19) (MLRA 149E
_ Sandy G	ileyed Matrix (S4)							Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
								Red Parent Material (F21)
_ Sandy R								
_ Stripped	Matrix (S6)							Very Shallow Dark Surface (TF12)
_ Stripped		ALRA 149	9B)					Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
_ Strippec _ Dark Su	l Matrix (S6) rface (S7) <b>(LRR R, N</b>			olog	y must b	e present, unl	ess disturbe	Other (Explain in Remarks)
Stripped Dark Sun	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg	getation		olog	y must b	e present, unl	ess disturbe	Other (Explain in Remarks)
_ Stripped _ Dark Sun ndicators ( estrictive L	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> :	getation	and wetland hydr	olog	y must b			Other (Explain in Remarks) d or problematic.
_ Stripped _ Dark Sun ndicators ( estrictive L	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type:	getation		rolog	y must b	e present, unl		Other (Explain in Remarks)
_ Strippec _ Dark Sun ndicators of estrictive L	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> :	getation	and wetland hydr	rolog	y must b			Other (Explain in Remarks) d or problematic.
_ Stripped _ Dark Sun ndicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	rolog	y must b			Other (Explain in Remarks) d or problematic.
_ Stripped _ Dark Sun indicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type:	getation a	and wetland hydr None	olog	y must b			Other (Explain in Remarks) d or problematic.
_ Stripped _ Dark Sun ndicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	rolog	y must be			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun ndicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	- -	y must bi			Other (Explain in Remarks) d or problematic.
_ Stripped _ Dark Sun ndicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-olog	y must bi			Other (Explain in Remarks) d or problematic.
_ Stripped _ Dark Sun ndicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None		y must bi			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun ndicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	rolog -	y must bi			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun indicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-	y must bi			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun indicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-	y must bi			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun ndicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-	y must bi			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun ndicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	- -	y must bi			Other (Explain in Remarks) d or problematic.
Stripped Dark Sun indicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	- 	y must bi			Other (Explain in Remarks) d or problematic.
Stripped Dark Sun ndicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-	y must bi			Other (Explain in Remarks) d or problematic.
Stripped Dark Sun ndicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-	y must bi			Other (Explain in Remarks) d or problematic.
Stripped Dark Sun ndicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	- olog	y must b			Other (Explain in Remarks) d or problematic.
_ Stripped _ Dark Sun indicators d estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-	y must b			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun ndicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None	-	y must b			Other (Explain in Remarks) d or problematic.
_ Strippec _ Dark Sun indicators ( estrictive L emarks:	l Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed)</b> : Type: Depth (inches):	getation a	and wetland hydr None		y must bi			Other (Explain in Remarks) d or problematic.

Hydrology Photos



Soil Photos



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Canajoharie, Mc	ontgomery County	Sampling Date: 202	22-July-06
Applicant/Owner: Suneast		State: NY	Sampling Point: W-M	LM-01_PSS-1
Investigator(s): Melanie Musarra	Sect	ion, Township, Range:		
Landform (hillslope, terrace, etc.): Flat	Local relief	(concave, convex, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 144A	of LRR R Lat:	42.8874141667 Long:	-74.549705	Datum: WGS84
Soil Map Unit Name: Ma - Madalin silty cl	lay loam		NWI classificatio	n: None
Are climatic/hydrologic conditions on the sit	te typical for this time of year?	Yes 🟒 No (If n	o, explain in Remarks.)	
· ,	lrology significantly disturbed? lrology naturally problematic?	Are "Normal Circums (If needed, explain ar	tances" present? ny answers in Remarks	Yes No .)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-MLM-01
Remarks: (Explain alternative procedures h	ere or in a separate report	)	
Covertype is PSS. Area is wetland, all three	wetland parameters are pi	resent.	

## HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of o	ne is required; check all tha	Secondary Indicators (minimum of two required)			
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Survival</li> </ul>	Aquatic F Marl Dep Hydroger Oxidized Presence Recent Ir Thin Muc agery (B7) Other (Ex	ained Leaves (B9) Fauna (B13) posits (B15) n Sulfide Odor (C1) Rhizospheres on Living Roc e of Reduced Iron (C4) on Reduction in Tilled Soils ck Surface (C7) cplain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>✓ Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>✓ Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>✓ FAC-Neutral Test (D5)</li> </ul>	
Field Observations:					
Surface Water Present?	Yes No 🟒	Depth (inches):		_	
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No	
Saturation Present?	Yes 🟒 No	Depth (inches):	0		
(includes capillary fringe)					
Describe Recorded Data (stream g	gauge, monitoring well, aeri	ial photos, previous inspecti	ions), if	available:	
Remarks:					
The criterion for wetland hydrolog	gy is met.				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-01\_PSS-1

ree Stratum (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That	t 9	(A)
				Are OBL, FACW, or FAC:		
				Total Number of Dominant Specie	s 9	(B)
				Across All Strata:		
				<ul> <li>Percent of Dominant Species That</li> <li>Are OBL, FACW, or FAC:</li> </ul>	100	(A/B)
				Prevalence Index worksheet:		
				Total % Cover of:	Multiply I	Bv:
				- OBL species 20	x 1 =	 20
	0	= Total Cov	er	FACW species 50	x 2 =	100
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 50	- x2 _	150
. Cornus racemosa	20	Yes	FAC	- FACU species 0		0
. Viburnum lentago	20	Yes	FAC	- UPL species 0	_ <u>×4</u> = x5 =	0
. Salix eriocephala	20	Yes	FACW	- Column Totals 120	(A)	270 (B)
					- `´ -	270 (B)
				Prevalence Index = B/A =		
				Hydrophytic Vegetation Indicators	:	
		·		1- Rapid Test for Hydrophytic	Vegetation	
·	60	= Total Cov	er	2 - Dominance Test is >50%		
lerb Stratum (Plot size: <u>5 ft</u> )			CI	$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{10}$		
. Onoclea sensibilis	10	Yes	FACW	4 - Morphological Adaptation	s <sup>1</sup> (Provide s	supporting
	10	Yes	FACT	- data in Remarks or on a separate	sheet)	
Eutrochium purpureum				Problematic Hydrophytic Veg	etation <sup>1</sup> (Ex	plain)
. Equisetum fluviatile		Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetla	nd hydrolog	gy must be
. Typha latifolia	10	Yes	OBL	present, unless disturbed or probl	ematic	
. Impatiens capensis	10	Yes	FACW	Definitions of Vegetation Strata:		
. Symphyotrichum lanceolatum	10	Yes	FACW	<b>Tree</b> – Woody plants 3 in. (7.6 cm)		liameter a
				breast height (DBH), regardless of		
				Sapling/shrub – Woody plants less		BH and
				greater than or equal to 3.28 ft (1		
0				Herb – All herbaceous (non-wood)		ardless of
1				size, and woody plants less than 3		
2.				Woody vines – All woody vines gre	ater than 3.	28 ft in
	60	= Total Cov	er	height.		
<u>Voody Vine Stratum (Plot size:30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 N	0
·						
·		·		-		
				-		
		<u> </u>		-		
		- Tatal Car		-		
	0	= Total Cov	er			

SOIL

ches) Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup> Tex	ture Remarks
0 - 6 10YR 3/1	100				Clay	Loam
- 18 10YR 3/1	98	2.5YR 6/4	2	С	M Clay	Loam
			· —		·	
					··	
					·	
					·	
e: C = Concentration, D =	Denletic	n RM = Reduced	Mat	rix MS =	Masked Sand Grains	$^{2}$ Location: PL = Pore Lining, M = Matrix.
ric Soil Indicators:	Depictic		Wide	17, 1415		Indicators for Problematic Hydric Soils <sup>3</sup> :
listosol (A1)		Polyvalue Be	low S	urface (S	8) (LRR R, MLRA 149B	5
Histic Epipedon (A2)					R, MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3)		Loamy Muck			(LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)		Loamy Gleye				Dark Surface (S7) (LRR K, L)
tratified Layers (A5)		Depleted Ma	-			Polyvalue Below Surface (S8) <b>(LRR K, L)</b>
Depleted Below Dark Surf	ace (A11					Thin Dark Surface (S9) (LRR K, L)
hick Dark Surface (A12)		Depleted Da				Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)		Redox Depre	ssior	IS (F8)		Piedmont Floodplain Soils (F19) (MLRA 149
Sandy Gleyed Matrix (S4)						Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
Sandy Redox (S5)						Red Parent Material (F21)
Stripped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Surface (S7) (LRR R, N	MLRA 14	9B)				Other (Explain in Remarks)
			olog	y must be	e present, unless dist	urbed or problematic.
licators of hydrophytic veg	getation	and wetland hydr	0.			
trictive Layer (if observed)	-		0			
	-	and wetland hydr None	<u>.</u>		Hydric Soil Present?	Yes 🟒 No
rictive Layer (if observed)		None	-		Hydric Soil Present?	Yes _ 🖌 No

Hydrology Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, N	/lontgomery	/ County		Sampling Date: 20	)22-July-06
Applicant/Owner: S	uneast				State:	NY		Sampling Point: W-N	/ILM-01_UPL-1
Investigator(s): Mela	anie Musarra			Se	ction, Town	ship, Rai	nge:		
Landform (hillslope, te	rrace, etc.):	Flat		Local relie	ef (concave,	convex,	none):	None	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		Lat	<b>:</b> 42.88743	93333	Long:	-74.549522	Datum: WGS84
Soil Map Unit Name:	Ma - Madali	n silty clay loam						NWI classificati	on: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	(If no	, explain in Remarks.	.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	0	,				tances" present? y answers in Remark	Yes No _ <b>_⁄_</b> s.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	re or in a separate report)		
Covertype is UPL. Area is upland, not all three	e wetland parameters are	present. Circumstances are not normal due to mowing	g of vegetation.

#### HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of	<u>one is required; check all t</u>	Secondary Indicators (minimum of two required)			
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ir</li> <li>Sparsely Vegetated Concave Statement (A2)</li> </ul>	— Aquatio — Marl D — Hydrog — Oxidize — Presen — Recent — Thin M magery (B7) — Other (	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots ice of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6 luck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations: Surface Water Present?		Dopth (inchas)			
	Yes No	Depth (inches):	<u> </u>		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No		
Saturation Present?	Yes 🟒 No	Depth (inches): 1	13		
(includes capillary fringe)					
Describe Recorded Data (stream Remarks: The criterion for wetland hydrolo		erial photos, previous inspection	s), ir available:		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-01\_UPL-1

<u>Free Stratum</u> (Plot size: <u>30 ft</u> )		Dominant	Indicator	Dominance Test worksheet:			
	% Cover	Species?	Status	Number of Dominant Specie	es That	0	(A)
·				Are OBL, FACW, or FAC:			
·				Total Number of Dominant S	Species	1	(B)
				Across All Strata:			
				Percent of Dominant Species	s That	0	(A/B)
				Are OBL, FACW, or FAC:			
				Prevalence Index worksheet			_
		· ·		- <u>Total % Cover of:</u>		lultiply	
	0	= Total Cov	er			1 = _	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		_		· ·		2 =	0
·				· ·		3 = _	0
						4 =	220
2				- UPL species	0 x	5 = _	0
						(A) _	220 (B)
·		······································		Prevalence Index =	= B/A =	4	
				- Hydrophytic Vegetation Indi	cators:		
		· ·		1- Rapid Test for Hydro	phytic Veg	etation	
				2 - Dominance Test is >	50%		
	0	= Total Cov	er	3 - Prevalence Index is	≤ 3.0 <sup>1</sup>		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adap	otations <sup>1</sup> (P	rovide	supporting
. Poa pratensis	40	Yes	FACU	- data in Remarks or on a sep	arate shee	t)	
2. Trifolium pratense	5	No	FACU	Problematic Hydrophy	tic Vegetat	ion¹ (Ex	plain)
3. Trifolium repens	5	No	FACU	<sup>1</sup> Indicators of hydric soil and	l wetland h	ydrolog	gy must be
. Plantago major	5	No	FACU	present, unless disturbed or	problema	tic	
				Definitions of Vegetation Str	ata:		
				Tree – Woody plants 3 in. (7.	6 cm) or m	iore in d	diameter a
7				breast height (DBH), regard	ess of heig	ht.	
3				Sapling/shrub - Woody plan			OBH and
)				greater than or equal to 3.28			
0				Herb – All herbaceous (non-	2.1		gardless of
1				size, and woody plants less t			
2				Woody vines – All woody vin	es greater	than 3.	.28 ft in
	55	= Total Cov	er	height.			
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetation Pre	sent? Yes	N	lo 🖌
		· ·		-			
		·		-			
1.		•		-			
	0	= Total Cov	er	-			
	0		Ci Ci				

SOIL

Depth	ription: (Describe Matrix		Redox						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	<u>.</u>	Remarks
0 - 7	10YR 3/1	100					Loam		
7 - 14	10YR 3/1	98	2.5YR 6/4	2	С	М	Clay Loai	m	
		·					-		
			-						
		- <u> </u>							
			-						
$\frac{1}{1}$	oncontration D -	 Doplatic	PM - Poducod	Mat	iv MS -	Maskod Sa	ad Grains 21	ocation: PL	= Pore Lining, M = Matrix.
		Depierio	n, rivi – reduced	widt	- CIVI , IVI -	waskeu Sa			*
ydric Soil II Histosol			Polyvalue Be		urface (S	8) <b>/  DD D &amp;</b>			for Problematic Hydric Soils <sup>3</sup> :
	(AT) ipedon (A2)		Thin Dark Su						/luck (A10) <b>(LRR K, L, MLRA 149B)</b>
_ HISUC EP _ Black His			Loamy Muck				וטני		Prairie Redox (A16) (LRR K, L, R)
	n Sulfide (A4)		Loamy Gleye			(y <b>L</b> )			Aucky Peat or Peat (S3) (LRR K, L, R)
	Layers (A5)		Depleted Ma						Surface (S7) (LRR K, L)
	Below Dark Surfa	ace (A11	)_✓ Redox Dark S	Surfa	ce (F6)				lue Below Surface (S8) (LRR K, L)
_ Thick Da	rk Surface (A12)		Depleted Da	rk Su	rface (F7)				ark Surface (S9) <b>(LRR K, L)</b> langanese Masses (F12) <b>(LRR K, L, R)</b>
Candy M	ucky Mineral (S1)		Redox Depre	ssior	ıs (F8)				ont Floodplain Soils (F12) (MLRA 149B)
_ Sanuy w									
	eyed Matrix (S4)							Mesic	Spodic (TA6) (MI RA 144A 145 149B)
	leyed Matrix (S4)								Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b> arent Material (E21)
Sandy Gl Sandy Re	leyed Matrix (S4)							Red Pa	arent Material (F21)
Sandy Gl Sandy Re Stripped	leyed Matrix (S4) edox (S5)	1LRA 149	9B)					Red Pa Very S	• • • • • • • • • • • • • • • • • • • •
Sandy Gl Sandy Re Stripped Dark Sur	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b>			olog	v must be	Poresent (	nless disturbe	Red Pa Very S Other	nent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks)
Sandy Gl Sandy Re Stripped Dark Sur ndicators c	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg	etation		rolog	y must be	e present, ι	nless disturbe	Red Pa Very S Other	nent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks)
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed):	etation	and wetland hydr	olog	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type:	etation		rolog	y must be	e present, u Hydric So		Red Pa Very S Other ed or proble	nent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks)
_ Sandy Gl _ Sandy Re _ Stripped _ Dark Sur ndicators c estrictive L	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed):	etation	and wetland hydr	rolog	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type:	etation a	and wetland hydr None	rolog	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	rolog	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
_ Sandy Gl _ Sandy Re _ Stripped _ Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	rolog	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None		y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	-	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
_ Sandy Gl _ Sandy Re _ Stripped _ Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	-	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
_ Sandy Gl _ Sandy Re _ Stripped _ Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	-	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None		y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None		y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None		y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	-	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
Sandy Gl Sandy Re Stripped Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	-	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.
_ Sandy Gl _ Sandy Re _ Stripped _ Dark Sur ndicators c estrictive L 	eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, N</b> of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	-	y must be			Red Pa Very S Other ed or proble	arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) matic.

### Hydrology Photos



Vegetation Photos

Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	ek Solar Projec	t	City/County:	Canajoharie	e, Mo	ontgomery	County		Sampling Date:	2022-July-06	
Applicant/Owner: S	uneast					State:	NY		Sampling Point:	W-MLM-02_PEM-1	i
Investigator(s): Mela	anie Musarra				Sect	ion, Towns	hip, Ra	nge:			
Landform (hillslope, te	errace, etc.):	Flat		Local r	elief	(concave, o	convex,	none):	None	Slope (%):	0 to 1
Subregion (LRR or ML	RA): MLR	A 144A of LRR R			Lat:	42.888722	23333	Long:	-74.551656	Datum: Wo	JS84
Soil Map Unit Name:	ChB - Churc	hville silty clay loa	am, 3 to 8 pe	rcent slopes					NWI classifie	cation: None	
Are climatic/hydrologi	c conditions o	n the site typical	for this time	of year?		Yes 🖌	_No	(If no	, explain in Rema	irks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	_ 0	tly disturbed problematic					tances" present? y answers in Rem	Yes 🟒 No _ harks.)	

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-MLM-02
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PEM. Area is wetland, all three v	wetland parameters are p	resent.	

#### HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of o	one is required; check all t	<u>that apply)</u>		Secondary Indicators (minimum of two required)			
<ul> <li> Surface Water (A1)</li> <li> High Water Table (A2)</li> <li> Saturation (A3)</li> <li> Water Marks (B1)</li> <li> Sediment Deposits (B2)</li> <li> Drift Deposits (B3)</li> <li> Algal Mat or Crust (B4)</li> <li> Iron Deposits (B5)</li> <li> Inundation Visible on Aerial Ir</li> <li> Sparsely Vegetated Concave S</li> </ul>	— Aquati — Marl D — Hydrog — Oxidize — Preser — Recent — Thin M nagery (B7) — Other	Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roo nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils ( Juck Surface (C7) (Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>			
Field Observations:							
Surface Water Present?	Yes No 🟒	Depth (inches):					
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No			
Saturation Present?	Yes 🟒 No	Depth (inches):	0				
(includes capillary fringe)							
Describe Recorded Data (stream	gauge, monitoring well, a	erial photos, previous inspecti	ions), if	available:			
Remarks:							
The criterion for wetland hydrolo	gy is met.						

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-02\_PEM-1

<u> Tree Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>100 Stratum</u> (FIOL SIZE. <u></u>	% Cover	Species?	Status	Number of Dominant S	•	3	(A)
				Are OBL, FACW, or FAC			
·				Total Number of Domir Across All Strata:	hant Species	3	(B)
·				Percent of Dominant S	pecies That		
		·		Are OBL, FACW, or FAC		100	(A/B)
		·		Prevalence Index work	sheet:		
		·		Total % Cover	<u>of:</u>	<u>Multiply</u>	By:
·				OBL species	25	x 1 =	25
	0	= Total Cov	er	FACW species	75	x 2 =	150
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
				FACU species	0	x 4 =	0
		·		- UPL species	0	x 5 =	0
		·		Column Totals	100	(A)	175 (B)
		·		Prevalence Ir	ndex = B/A =	1.8	
·				Hydrophytic Vegetation	n Indicators:		
·		·		1- Rapid Test for I		'egetatior	n
·		<u> </u>		2 - Dominance Te		0	
	0	= Total Cov	er	3 - Prevalence Ind			
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological		(Provide	supporting
. Phalaris arundinacea	45	Yes	FACW	data in Remarks or on			
. Lythrum salicaria	20	Yes	OBL	Problematic Hydr	ophytic Vege	tation <sup>1</sup> (Ex	(plain)
8. Onoclea sensibilis	20	Yes	FACW	<sup>1</sup> Indicators of hydric so	il and wetland	d hydrolo	gy must be
. Impatiens capensis	10	No	FACW	present, unless disturb	ed or probler	matic	
. Persicaria sagittata	5	No	OBL	Definitions of Vegetation	on Strata:		
i				Tree – Woody plants 3	in. (7.6 cm) or	more in	diameter a
				breast height (DBH), re	gardless of h	eight.	
				Sapling/shrub - Woody			OBH and
				greater than or equal t			
0				Herb – All herbaceous			gardless of
1				size, and woody plants			
2				Woody vines – All wood	dy vines great	er than 3	.28 ft in
	100	= Total Cov	er	height.			
<u> Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetatio	n Present?	/es 🟒 N	lo
				_			
3.							
1.							
		= Total Cov	er				
		-					

SOIL

Color (moist)         %         Color (moist)         %         Type'         Loc2         Texture         Remarks           0 - 12         10YR 3/1         96         10YR 5/6         4         C         M/PL         Clay Loam
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix.         dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) / Redox Dark Surface (F7)       Thin Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (54)       Redox Depressions (F8)         Sandy Redox (S5)       Piedmont Floodplain Soils (F12) (LRR K, 144, 145, 14
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)        Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145, 1         Strianged Matrix (F6)       Red Parent Material (F21)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)        Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145, 1         Stripped Matrix (S6)       Red Parent Material (F21)
Iric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Nedox (S5)         Stripped Matrix (S6)      Depleted Matrix (F2)         Sandy Redox (S5)      Depleted Dark Surface (F7)         Sandy Redox (S5)
Iric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Nedox (S5)         Stripped Matrix (S6)      Depleted Matrix (F2)         Sandy Redox (S5)      Depleted Dark Surface (F7)         Sandy Redox (S5)
dirc Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) / Redox Dark Surface (F6)       Thin Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Mesic Spodic (TA6) (MLRA 144A, 145, 1         Sandy Redox (S5)       Stripped Matrix (S2)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) / Redox Dark Surface (F6)       Thin Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145, 1         Stripped Matrix (S2)       Red Parent Material (F21)
Iric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Nedox (S5)         Stripped Matrix (S6)      Depleted Matrix (F2)         Sandy Redox (S5)      Depleted Dark Surface (F7)         Sandy Redox (S5)
Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)      Depleted Dark Surface (F7)         Thin Dark Surface (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Nedox Depressions (F8)         Sandy Redox (S5)      Red Parent Material (F21)
Iric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Nedox (S5)         Stripped Matrix (S6)      Depleted Matrix (F2)         Sandy Redox (S5)      Depleted Dark Surface (F7)         Sandy Redox (S5)
Iric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Nedox (S5)         Stripped Matrix (S6)      Depleted Matrix (F2)         Sandy Redox (S5)      Depleted Dark Surface (F7)         Sandy Redox (S5)
dirc Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) / Redox Dark Surface (F6)       Thin Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S4)       Mesic Spodic (TA6) (MLRA 144A, 145, 1         Sandy Redox (S5)       Stripped Matrix (S2)
Iric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Nedox (S5)         Stripped Matrix (S6)      Depleted Matrix (F2)         Sandy Redox (S5)      Depleted Dark Surface (F7)         Sandy Redox (S5)
Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)        Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 1         Sandy Redox (S5)       Stripped Matrix (F2)
Histic Epipedon (A2)
Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Iron-Manganese Masses (F12) (LRR K, L)         Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 1         Sandy Redox (S5)       Kripped Matrix (S6)       Red Parent Material (F21)
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)      5 cm Mucky Peat or Peat (S3) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)      Redox Dark Surface (F6)      Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)      Iron-Manganese Masses (F12) (LRR K, L)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)      Iron-Manganese Masses (F12) (LRR K, I)         Sandy Redox (S5)
Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11) ✓       Redox Dark Surface (F6)      Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)      Iron-Manganese Masses (F12) (LRR K, L)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)      Piedmont Floodplain Soils (F19) (MLRA         Sandy Redox (S5)      Red Parent Material (F21)
Depleted Below Dark Surface (A11) → Redox Dark Surface (F6)
Thick Dark Surface (A12)
Sandy Mucky Mineral (S1)      Redox Depressions (F8)      Iron-Manganese Masses (F12) (LRR K, I         Sandy Gleyed Matrix (S4)      Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 1         Sandy Redox (S5)      Red Parent Material (F21)
Sandy Gleyed Matrix (S4)       Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 1         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145, 1         Stripped Matrix (S6)       Red Parent Material (F21)
Sandy Redox (S5) Mesic Spodic (1A6) (MLRA 144A, 145, 1 Red Parent Material (F21)
Stripped Matrix (S6)
Very Shallow Dark Surface (1-12)
Dark Surface (S7) (IDD D MIDA 140P)
dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
strictive Layer (if observed):
Type: None Hydric Soil Present? Yes 🖌 No
Depth (inches):

Hydrology Photos



Vegetation Photos



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t <b>(</b>	City/County:	Canajoharie	e, Mo	ontgomery Coun	y	Sampling Date:	2022-July-06	
Applicant/Owner: S	uneast					State: NY		Sampling Point: \	W-MLM-02_UPL-1	
Investigator(s): Mela	anie Musarra				Sect	ion, Township, R	ange:			
Landform (hillslope, te	rrace, etc.):	Flat		Local r	elief	(concave, conve	k, none):	None	<b>Slope (%):</b> 0 to	o 1
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R			Lat:	42.8886635288	Long:	-74.5516007347	Datum: WGS8	4
Soil Map Unit Name:	ChB - Churc	nville silty clay loa	ım, 3 to 8 pe	rcent slopes				NWI classific	ation:	
Are climatic/hydrologic	c conditions o	n the site typical f	or this time	of year?		Yes 🟒 No _	(If no	o, explain in Remai	rks.)	
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	_ 0	5				tances" present? ly answers in Rema	Yes No⁄ arks.)	-

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒	
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland? Yes No _
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures he	re or in a separate report	)
Covertype is UPL. Area is upland, not all thre	e wetland parameters are	e present. Circumstances are not normal due to agricultural activities.

#### HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum o	f one is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two required)			
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial</li> <li>Sparsely Vegetated Concave</li> </ul>	Aquat Marl E Hydro Oxidiz Presei Recen Thin M Imagery (B7) Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) Auck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>			
Field Observations:						
Surface Water Present?	Yes No 🟒	Depth (inches):				
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No			
Saturation Present?	Yes No 🟒	Depth (inches):	_			
(includes capillary fringe)			_			
Remarks:	n gauge, monitoring Well, a	aerial photos, previous inspections), if	สงสแสมเช.			
The criterion for wetland hydro	logy is not met.					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-02\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		e Dominant <sup>-</sup> Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	0	
				Are OBL, FACW, or FAC:	0	(A)
2.				Total Number of Dominant Species	1	(B)
3 4				<ul> <li>Percent of Dominant Species That</li> <li>Are OBL, FACW, or FAC:</li> </ul>	0	(A/B)
5				- Prevalence Index worksheet:		
5				- <u>Total % Cover of:</u>	Multiply	Bv:
7				- OBL species 0	x 1 =	<u>ру.</u> 0
	0	= Total Cov	er	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x 3 =	0
I				- FACU species 0	x 4 =	0
2				- UPL species 90	x 5 =	450
3						
4.					(A)	450 (B)
5.		· ·		Prevalence Index = B/A =		
5.		· ·		Hydrophytic Vegetation Indicators:		
7.		· ·		1- Rapid Test for Hydrophytic	Vegetation	I
·	0	= Total Cov	er	2 - Dominance Test is > 50%		
<u>Herb Stratum (Plot size: _5 ft _)</u>				$\_$ 3 - Prevalence Index is $\leq 3.0^1$		
1. Zea mays	90	Yes	UPL	4 - Morphological Adaptation		supporting
2.		103	UL	- data in Remarks or on a separate s		
		· ·		Problematic Hydrophytic Veg		•
		· ·		<sup>1</sup> Indicators of hydric soil and wetla	-	gy must be
		· ·		present, unless disturbed or proble	ematic	
		· ·		Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) o		diameter a
7				breast height (DBH), regardless of	-	
8				Sapling/shrub – Woody plants less		OBH and
9				greater than or equal to 3.28 ft (1 r		
10				Herb – All herbaceous (non-woody		gardless of
11				size, and woody plants less than 3.		
12				Woody vines – All woody vines grea	ater than 3	.28 ft in
		= Total Cov	er	height.		
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )		_		Hydrophytic Vegetation Present?	Yes N	lo 🖌
1.						
2.		· ·		-		
3.		· ·		-		
4.	· ·	· ·		-		
1.	0	= Total Cov	or	-		
	0	- 10tal C0V	CI			

SOIL

ches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
- 12	10YR 3/2	100					Loam	
		_						
				·				
		_		_				
	concentration, D = I Indicators:	Depletic	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L	ocation: PL = Pore Lining, M = Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Bel	ow S	urface (S	8) (I RR R	MI RA 149B)	,
	bipedon (A2)		Thin Dark Su		-		· ·	2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b> Coast Prairie Redox (A16) <b>(LRR K, L, R)</b>
	stic (A3)		Loamy Mucky	/ Min	eral (F1)	(LRR K, L)	)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surface (S7) <b>(LRR K, L)</b>
	d Layers (A5)		Depleted Mat					Polyvalue Below Surface (S8) (LRR K, L)
	d Below Dark Surfa	ce (A11						Thin Dark Surface (S9) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Dar					Iron-Manganese Masses (F12) <b>(LRR K, L, R)</b>
	lucky Mineral (S1)		Redox Depre	SSIO	IS (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	ileyed Matrix (S4) edox (S5)							Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	d Matrix (S6)							Red Parent Material (F21)
	rface (S7) <b>(LRR R, N</b>	ILRA 149	ЭВ)					Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	of hydrophytic veg		and wetland hydr	olog	y must b	e present	t, unless disturbe	ed or problematic.
rictive l	_ayer (if observed):							
	Туре:		None			Hydric S	Soil Present?	Yes No⁄_
	Depth (inches):							
arks:	indication of hydri	c soils w	as observed.			1		

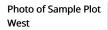
### Hydrology Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South





## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mo	ntgome	ry County		Sampling Date:	2022-July-19	
Applicant/Owner: S	uneast				S	tate: NY		Sampling Point: \	W-MLM-03_PE	M-1
Investigator(s): Mela	nie Musarra			S	ection, T	ſownship, Ra	nge:			
Landform (hillslope, te	rrace, etc.):	Depression		Local rel	lief (cond	cave, convex,	, none):	Concave	Slope (	<b>%):</b> 1 to 3
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		La	at: 42.8	47982338	Long:	-74.4601265633	Datum:	WGS84
Soil Map Unit Name:	IIA - Ilion silt	loam, 0 to 3 per	cent slopes					NWI classific	ation: None	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)										
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	0	ly disturbed? problematic?				tances" present? y answers in Rem	Yes arks.)	No 🟒

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No						
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-MLM-03						
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Circumstances are not normal due to agricultural activities.									

### HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of or	<u>ne is required; check all tha</u>	<u>at apply)</u>		Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>				<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:						
Surface Water Present?	Yes No _	Depth (inches):				
Water Table Present?	Yes No	Depth (inches):		Wetland Hydrology Present?   Yes No		
Saturation Present?	Yes 🟒 No	Depth (inches):	0	_		
(includes capillary fringe)						
Describe Recorded Data (stream g	auge, monitoring well, aeri	al photos, previous inspec	tions), if	available:		
Remarks:						
The criterion for wetland hydrolog	y is met.					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-03\_PEM-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	4	(A)
				Total Number of Dominant Species		
23.				Across All Strata:	4	(B)
				Percent of Dominant Species That	100	(A/B)
				Are OBL, FACW, or FAC:		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Prevalence Index worksheet:		
		·		- <u>Total % Cover of:</u>	<u>Multiply</u>	-
	0	= Total Cov	er	- OBL species <u>30</u>	x 1 =	30
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FACW species 60	x 2 =	120
. Salix cordata	30	Yes	FAC	FAC species <u>30</u>	x 3 =	90
				FACU species 0	x 4 =	0
				UPL species 0	x 5 =	0
				- Column Totals 120	(A)	240 (B)
·				Prevalence Index = B/A =	2	
				Hydrophytic Vegetation Indicators:		
· · · · · · · · · · · · · · · · · · ·				1- Rapid Test for Hydrophytic	Vegetation	
·	30	= Total Cov	or	∠_ 2 - Dominance Test is >50%		
lerb Stratum (Plot size: <u>5 ft</u> )		- 10001 000	CI	$\_$ ✓ 3 - Prevalence Index is $\le 3.0^1$		
. Typha latifolia	30	Yes	OBL	4 - Morphological Adaptations		supportin
	30	Yes	FACW	- data in Remarks or on a separate sl		
2. Onoclea sensibilis 3. Phalaris arundinacea	30	Yes	FACW	Problematic Hydrophytic Vege		
		165	FACVV	<sup>1</sup> Indicators of hydric soil and wetlar	, ,	gy must b
l				present, unless disturbed or proble	matic	
				Definitions of Vegetation Strata:		
		<u> </u>		Tree – Woody plants 3 in. (7.6 cm) o		diameter a
7				breast height (DBH), regardless of h	-	
				Sapling/shrub – Woody plants less t greater than or equal to 3.28 ft (1 m		внапо
				Herb – All herbaceous (non-woody)		ardlass o
0				size, and woody plants less than 3.2		ai uless o
1				Woody vines – All woody vines grea		28 ft in
2				height.	ter than 5.	201111
	90	= Total Cov	er			•
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?		0
l				-		
2				_		
3				-		
4				_		
	0	= Total Cov	er			

SOIL

Depth	cription: (Describe Matrix		Redox						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textur	e	Remarks
0 - 4	10YR 3/1	100					Loam	l	
4 - 18	10YR 2/1	85	10YR 3/6	10	С	М	Clay Loa	am	
4 - 18			N 2.5/						
oe: C = (	Concentration, D =	Depletio	on. RM = Reduced	d Mati	ix. MS =	Masked	Sand Grains. 2	Location: PL	= Pore Lining, M = Matrix.
	Indicators:		,						s for Problematic Hydric Soils <sup>3</sup> :
Histoso			Polyvalue Be	low S	urface (S	8) (LRR	R, MLRA 149B)		Muck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Su						Prairie Redox (A16) <b>(LRR K, L, R)</b>
	istic (A3)		Loamy Muck						Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye						Surface (S7) <b>(LRR K, L)</b>
	d Layers (A5)		Depleted Ma	-	-				alue Below Surface (S8) <b>(LRR K, L)</b>
	ed Below Dark Surf	ace (A11							Dark Surface (S9) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Da			)			Manganese Masses (F12) <b>(LRR K, L, R)</b>
	Mucky Mineral (S1)		Redox Depre	ession	S (F8)			Piedm	nont Floodplain Soils (F19) <b>(MLRA 149B)</b>
-	Gleyed Matrix (S4)							Mesic	Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	Redox (S5) d Matrix (S6)								arent Material (F21)
	urface (S7) <b>(LRR R, N</b>	/I DA 1/	0P)					-	Shallow Dark Surface (TF12)
								Other	(Explain in Remarks)
dicators	of hydrophytic veg	etation	and wetland hyd	rolog	/ must b	e preser	nt, unless disturb	oed or proble	ematic.
strictive	Layer (if observed)	:							
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
emarks:	Type:					Hydric	Soil Present?		Yes No

Hydrology Photos



Vegetation Photos



Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



Photo of Sample Plot South



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t <b>(</b>	City/County: Sp	rakers, Montg	gomery County		Sampling Date:	2022-July-19
Applicant/Owner: S	uneast				State: NY		Sampling Point: V	V-MLM-03_UPL-1
Investigator(s): Mela	nie Musarra			Sect	ion, Township, Ra	nge:		
Landform (hillslope, te	rrace, etc.):	Flat		Local relief	(concave, convex,	none):	None	Slope (%): 0 to 1
Subregion (LRR or MLR	RA): MLR	A 144A of LRR R		Lat:	42.8480548555	Long:	-74.4599484292	Datum: WGS84
Soil Map Unit Name:	IIA - Ilion silt	loam, 0 to 3 perc	ent slopes				NWI classifica	ation:
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)								
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	_ 0 ,				tances" present? y answers in Rema	Yes No _ <b>_</b> arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland? Yes No	>_∠_						
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present. Circumstances are not normal due to agricultural activities.									

#### HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of	one is required; check all	Secondary Indicators (minimum of two required)			
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial In</li> <li>Sparsely Vegetated Concave Statement</li> </ul>	— Aquati — Marl D — Hydro, — Oxidiz — Preser — Recent — Thin M magery (B7) — Other	Stained Leaves (B9) ic Fauna (B13) peposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) 1uck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations: Surface Water Present?	Yes No 🟒	Depth (inches):			
Water Table Present? Saturation Present?	Yes No 🟒 Yes No 🟒	Depth (inches): Depth (inches):	_ Wetland Hydrology Present? Yes № _∠ _		
(includes capillary fringe)					
Remarks: The criterion for wetland hydrolo		erial photos, previous inspections), if			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-03\_UPL-1

<u>Free Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
				Total Number of Dominant Species	<sup>5</sup> 2	(D)
				Across All Strata:		(B)
				Percent of Dominant Species That	50	(A/B)
				Are OBL, FACW, or FAC:		
				Prevalence Index worksheet:		_
				- <u>Total % Cover of:</u>	<u>Multiply I</u>	•
	0	= Total Cov	er	- OBL species 5	x 1 =	5
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FACW species 35	x 2 =	70
· · · · · · · · · · · · · · · · · · ·				FAC species 0	x 3 =	0
				FACU species 10	× 4 =	40
				- UPL species 50	x 5 =	250
		·		- Column Totals 100	(A)	365 (B)
				Prevalence Index = B/A =		
				Hydrophytic Vegetation Indicators		
				<ul> <li>1- Rapid Test for Hydrophytic</li> <li>2 - Dominance Test is &gt; 50%</li> </ul>	vegetation	
	0	= Total Cov	er	2 - Dominance Test is > 50% 3 - Prevalence Index is $\leq 3.0^{1}$		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )		_		4 - Morphological Adaptation		upportin
. Zea mays	50	Yes	UPL	- data in Remarks or on a separate s		upportin
. Phalaris arundinacea	35	Yes	FACW	Problematic Hydrophytic Veg		olain)
. Fragaria virginiana	10	No	FACU	- <sup>1</sup> Indicators of hydric soil and wetla		
. Lythrum salicaria	5	No	OBL	present, unless disturbed or probl		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm)	or more in d	liameter a
				breast height (DBH), regardless of	height.	
B				Sapling/shrub – Woody plants less		BH and
				greater than or equal to 3.28 ft (1 r		
0				Herb – All herbaceous (non-woody		ardless o
1				size, and woody plants less than 3.		
2				Woody vines – All woody vines gre	ater than 3.	28 ft in
	100	= Total Cov	er	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 N	0
				_		
				_		
3				_		
ł				_		
	0	= Total Cov	er			

SOIL

Depth	ription: (Describe Matrix		Redox						
inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	2	Remarks
0 - 14	10YR 3/2	100		· <u>· · ·</u>			Loam		
14 - 16	10YR 3/2	98	2.5YR 6/4	2	С	М	Clay Loa		
1 10	1011(3)2		2.511(6)1	-					
<u> </u>									
<u> </u>				-					
				-					
				-					
				· —					
	Concentration, D =	Depletic	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L		L = Pore Lining, M = Matrix.
	Indicators:							Indicato	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Bel					2 cm	Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
	pipedon (A2)		Thin Dark Su					Coas	st Prairie Redox (A16) <b>(LRR K, L, R)</b>
Black Hi	. ,		Loamy Mucky			(LRR K, L	-)	5 cm	Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4) d Layers (A5)		Loamy Gleye Depleted Ma						: Surface (S7) <b>(LRR K, L)</b>
	d Below Dark Surfa								value Below Surface (S8) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Dark						Dark Surface (S9) <b>(LRR K, L)</b>
	lucky Mineral (S1)		Redox Depre						Manganese Masses (F12) <b>(LRR K, L, R)</b>
	leyed Matrix (S4)								mont Floodplain Soils (F19) <b>(MLRA 149B)</b>
-	edox (S5)								ic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	d Matrix (S6)								Parent Material (F21)
	rface (S7) <b>(LRR R, N</b>		9B)						Shallow Dark Surface (TF12)
Durk Su			56)					Othe	er (Explain in Remarks)
dicators	of hydrophytic veg	etation	and wetland hydr	olog	y must b	e presen	t, unless disturbe	ed or probl	lematic.
strictive l	_ayer (if observed):	:							
	Туре:		None			Hydric	Soil Present?		Yes No
	Depth (inches):								
positive	indication of hydri	ic soils w	vas observed.						

Hydrology Photos



Vegetation Photos



Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County: Sprake	ers, Montg	gomery County		Sampling Date:	2022-July-19
Applicant/Owner: S	uneast				State: NY		Sampling Point: V	V-MLM-04_PEM-1
Investigator(s): Mela	anie Musarra			Sect	ion, Township, Ra	nge:		
Landform (hillslope, te	errace, etc.):	Hillslope	Lo	ocal relief	(concave, convex,	, none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		Lat:	42.8445298566	Long:	-74.4618717085	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	on silt loam, 3 to	8 percent slopes				NWI classifica	ation: None
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)								
Are Vegetation, Are Vegetation,		, 0,	significantly distu naturally problen				tances" present? y answers in Rema	Yes 🟒 No arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No						
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-MLM-04						
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Area is wetland, all three wetland parameters are present.									

### HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of o	ne is required; check all tha	<u>at apply)</u>		Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Survival</li> </ul>	Aquatic F Marl Dep Hydroger Oxidized Presence Recent In Thin Muc hagery (B7) Other (Ex	ained Leaves (B9) Fauna (B13) rosits (B15) n Sulfide Odor (C1) Rhizospheres on Living Ro e of Reduced Iron (C4) on Reduction in Tilled Soils k Surface (C7) rplain in Remarks)		<ul> <li> Surface Soil Cracks (B6)</li> <li> Drainage Patterns (B10)</li> <li> Moss Trim Lines (B16)</li> <li> Dry-Season Water Table (C2)</li> <li> Crayfish Burrows (C8)</li> <li> Saturation Visible on Aerial Imagery (C9)</li> <li> Stunted or Stressed Plants (D1)</li> <li> Geomorphic Position (D2)</li> <li> Shallow Aquitard (D3)</li> <li> Microtopographic Relief (D4)</li> <li> FAC-Neutral Test (D5)</li> </ul>		
Field Observations:						
Surface Water Present?	Yes No 🟒	Depth (inches):				
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No		
Saturation Present?	Yes 🟒 No	Depth (inches):	0			
(includes capillary fringe)						
Describe Recorded Data (stream g	;auge, monitoring well, aeri	al photos, previous inspec	tions), if	available:		
Remarks:	n / ic mot					
The criterion for wetland hydrolog	,y is met.					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-04\_PEM-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant	Indicator	Dominance Test works			
	% Cover	Species?	Status	Number of Dominant		3	(A)
				Are OBL, FACW, or FAC			
				Total Number of Domi Across All Strata:	nant Species	3	(B)
·					nacios That		
ŀ				Percent of Dominant S Are OBL, FACW, or FAC	•	100	(A/B)
5				Prevalence Index work			
<u> </u>				Total % Cover		Multiply	Bur
7				- OBL species	35	x 1 =	<u>ру.</u> 35
	0	= Total Cov	er	FACW species	35	x 2 =	70
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FAC species	20	x 3 =	60
				FACU species	10	x 4 =	40
2				UPL species	0		
3.				· · ·		x 5 =	0
ŀ.				Column Totals	100	(A)	205 (B)
5.					ndex = B/A =	2.1	
				Hydrophytic Vegetatio	n Indicators:		
				1- Rapid Test for		'egetatio	ו
·	0	= Total Cov	er	2 - Dominance Te			
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )		-		3 - Prevalence Inc			
. Typha angustifolia	25	Yes	OBL	4 - Morphologica	•		supporting
2. Phalaris arundinacea	20	Yes	FACW	data in Remarks or on			
3. Onoclea sensibilis		Yes	FACW	Problematic Hydi			
4. Carex vulpinoidea	10	No	OBL	<sup>1</sup> Indicators of hydric so		,	ogy must be
5. Eutrochium purpureum	10	No	FAC	present, unless disturb		natic	
5. Melilotus officinalis	10	No	FACU	Definitions of Vegetation			
7. Equisetum arvense	10	No	FAC	Tree – Woody plants 3 breast height (DBH), re			diameter a
3.	10	110	FAC	Sapling/shrub – Wood			DBH and
				greater than or equal t			DDITAIL
 10.				Herb – All herbaceous			gardless of
				size, and woody plants			0
11				Woody vines - All woo			8.28 ft in
12				height.	, 0		
	100	= Total Cov	er	Hydrophytic Vegetatio	n Present?	es 🖌	No
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )							
l				•			
2							
3							
4							
	0	= Total Cov	er				

SOIL

Depth	Matrix		depth needed to Redo		tures			
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
) - 14	10YR 3/1	98	2.5YR 6/4	2	С	M/PL	Clay Loan	m
				· —				
				_				
		·		· —				
		·						
				·				
		· <u> </u>		· —				
	_	_						
e: ( = (	oncentration, D = I	 Deplet	ion. RM = Reduce	d Ma	atrix. MS =	- Masked Sa	nd Grains, 21 o	ocation: PL = Pore Lining, M = Matrix.
	ndicators:	- opiet						Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue B		-			2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
	pipedon (A2)		Thin Dark S				49B)	Coast Prairie Redox (A16) (LRR K, L, R)
	stic (A3)		Loamy Muc	-				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gley					Dark Surface (S7) (LRR K, L)
	d Layers (A5) d Below Dark Surfa	000 (11	Depleted M					Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted Date			7)		Thin Dark Surface (S9) (LRR K, L)
	lucky Mineral (S1)		Redox Depr			)		Iron-Manganese Masses (F12) (LRR K, L, R)
-	<b>,</b>			CSSIC	JIIS (FO)			Piedmont Floodplain Soils (F19) (MLRA 149E
-	leyed Matrix (S4)							Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
	edox (S5)							Red Parent Material (F21)
	l Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) <b>(LRR R, N</b>	ILRA 14	49B)					Other (Explain in Remarks)
	of hydrophytic veg		and wetland hyd	irolo	gy must k	be present, i	unless disturbe	ed or problematic.
trictive l	ayer (if observed):		None			Lludric Coil	Drocont?	
	Туре:		None			Hydric Soil	Present?	Yes No
narks:	Depth (inches):							
ositive ir	ndication of hydric	soil wa	is observed.					

Hydrology Photos



Vegetation Photos



US Army Corps of Engineers

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek S	Solar Project	-	City/County:	Sprakers, Mo	ontgome	ery County		Sampling Date:	2022-July-19
Applicant/Owner: Sun	neast					State: NY		Sampling Point: V	V-MLM-04_PFO-1
Investigator(s): Melani	ie Musarra				Section,	Township, Ra	nge:		
Landform (hillslope, terra	ace, etc.):	Depression		Local re	elief (con	cave, convex,	none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA)	): MLR/	A 144A of LRR R		L	at: 42.8	3438253987	Long:	-74.4617536035	Datum: WGS84
Soil Map Unit Name:	Ma - Madalir	n silty clay loam						NWI classifica	ation: None
Are climatic/hydrologic c	onditions or	the site typical	for this time	of year?	Ye	es 🟒 No 🔄	(If no	, explain in Remar	ks.)
•		or Hydrology or Hydrology	0	5				tances" present? y answers in Rema	Yes 🟒 No
	,	or myurology			(	ii needed, ex		y answers in Rema	11 KS.J

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No										
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No								
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-MLM-04								
Remarks: (Explain alternative procedures here or in a separate report)											
Covertype is PFO. Area is wetland, all three wetland parameters are present.											

# HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of or	ne is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Image Sparsely Vegetated Concave Surface</li> </ul>	— Aquat — Marl I — Hydro _ Oxidiz — Presei — Recen — Thin M agery (B7) — Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) red Rhizospheres on Living Ro nce of Reduced Iron (C4) it Iron Reduction in Tilled Soils Auck Surface (C7) (Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:						
Surface Water Present?	Yes No 🟒	Depth (inches):				
Water Table Present?	Yes No	Depth (inches):		Wetland Hydrology Present? Yes No		
Saturation Present?	Yes 🟒 No	Depth (inches):	0			
(includes capillary fringe)						
Describe Recorded Data (stream g	auge, monitoring well, a	aerial photos, previous inspec	tions), if	available:		
Remarks:	vic mot					
The criterion for wetland hydrolog	y is met.					

# VEGETATION -- Use scientific names of plants.

## Sampling Point: W-MLM-04\_PFO-1

ree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	6	
. Fraxinus nigra	40	Yes	FACW	Are OBL, FACW, or FAC:	0	(A)
2. Carpinus caroliniana	30	Yes	FAC	Total Number of Dominant Species	6	(B)
3. Betula alleghaniensis	30	Yes	FAC	Across All Strata:		
- <u></u> ŀ.				Percent of Dominant Species That	100	(A/B)
i.				Are OBL, FACW, or FAC:		
5.				Prevalence Index worksheet:		
				- <u>Total % Cover of:</u>	Multiply I	•
	100	= Total Cov	er	- OBL species 60	x 1 =	60
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FACW species 70	x 2 =	140
. Carpinus caroliniana	20	Yes	FAC	FAC species 80	x 3 =	240
2.				FACU species 0	x 4 =	0
3.				- UPL species 0	x 5 =	0
				- Column Totals 210	(A)	440 (B
				Prevalence Index = B/A =	2.1	<u> </u>
				- Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetation	
		Tabal Car		2 - Dominance Test is >50%		
	20	= Total Cov	er	$\checkmark$ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )	50			4 - Morphological Adaptations	<sup>1</sup> (Provide s	supporting
. Carex stricta	50	Yes	OBL	- data in Remarks or on a separate s	neet)	
2. Laportea canadensis	20	Yes	FACW	Problematic Hydrophytic Vege	etation <sup>1</sup> (Ex	plain)
3. <i>Caltha palustris</i>	10	No	OBL	Indicators of hydric soil and wetlar	nd hydrolog	gy must b
. Impatiens capensis	5	No	FACW	_ present, unless disturbed or proble	matic	
5. Onoclea sensibilis	5	No	FACW	_ Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) o	r more in c	liameter a
·				breast height (DBH), regardless of h		
B				Sapling/shrub – Woody plants less		)BH and
)				greater than or equal to 3.28 ft (1 n		
0				Herb – All herbaceous (non-woody)		sardless o
1				size, and woody plants less than 3.2		20 6
2				<ul> <li>Woody vines – All woody vines greated</li> </ul>	ter than 3.	28 ft in
	90	= Total Cov	er	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 N	0
				_		
2.						
3.				-		
l.				-		
	0	= Total Cov		-		

SOIL

Depth	Matrix		Redox	Feat	ures		nfirm the al		
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu	ure	Remarks
0 - 5	10YR 2/1	98	2.5YR 6/4	2	C	PL	Silty Clay	/ Loam	
5 - 14	10YR 8/4	98	2.5YR 6/4	2	С	M	Sandy		
/pe: C = (	Concentration, D = l	Depletio	on, RM = Reduced	l Mat	rix, MS =	Masked Sand	Grains. <sup>2</sup> Lo	ocation: PL = Poi	re Lining, M = Matrix.
dric Soil	Indicators:							Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histoso			Polyvalue Be					2 cm Muck	(A10) <b>(LRR K, L, MLRA 149B)</b>
	pipedon (A2)		Thin Dark Su				3)	Coast Prair	rie Redox (A16) <b>(LRR K, L, R)</b>
-	istic (A3)		Loamy Muck	-		(LRR K, L)		5 cm Muck	y Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4) d Layers (A5)		Loamy Gleye						ce (S7) <b>(LRR K, L)</b>
	d Below Dark Surfa	ace (A11	•					,	3elow Surface (S8) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Da						Surface (S9) <b>(LRR K, L)</b>
									anese Masses (F12) <b>(LRR K, L, R)</b>
_Sandy M	/lucky Mineral (S1)		Redox Depre	essior	าร (F8)				
_ ,			Redox Depre	essior	ıs (F8)				Floodplain Soils (F19) (MLRA 149B)
_ Sandy (	/lucky Mineral (S1)		Redox Depre	essior	ıs (F8)			Mesic Spoo	dic (TA6) <b>(MLRA 144A, 145, 149B)</b>
_ Sandy ( _ Sandy F	/lucky Mineral (S1) Gleyed Matrix (S4)		Redox Depre	essior	ıs (F8)			Mesic Spoo Red Parent	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21)
_ Sandy ( _ Sandy F _ Strippe	Aucky Mineral (S1) Gleyed Matrix (S4) Redox (S5)	ILRA 14		essior	ıs (F8)			Mesic Spoo Red Parent Very Shallo	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12)
_ Sandy ( _ Sandy F _ Strippe _ Dark Su	Aucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b>		9B)			a procent unle	es disturbo	Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks)
_ Sandy ( _ Sandy F _ Strippe _ Dark Su	Aucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, M</b> of hydrophytic veg	etation	9B)			e present, unle	ess disturbe	Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks)
_ Sandy ( _ Sandy F _ Strippe _ Dark Su	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, M</b> of hydrophytic veg Layer (if observed):	etation	<b>9B)</b> and wetland hyd					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
_ Sandy ( _ Sandy F _ Strippe _ Dark Su dicators	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	etation	9B)			e present, unle Hydric Soil P		Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks)
Sandy C Sandy F Strippe Dark Su dicators	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, M</b> of hydrophytic veg Layer (if observed):	etation	<b>9B)</b> and wetland hyd					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
_ Sandy C _ Sandy F _ Strippe _ Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
_ Sandy ( _ Sandy F _ Strippe _ Dark SL dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
_ Sandy ( _ Sandy F _ Strippe _ Dark SL dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ow Dark Surface (TF12) lain in Remarks) c.
_ Sandy C _ Sandy F _ Strippe _ Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12) lain in Remarks) c.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation	<b>9B)</b> and wetland hyd None					Mesic Spoo Red Parent Very Shallo Other (Exp	dic (TA6) <b>(MLRA 144A, 145, 149B)</b> t Material (F21) ww Dark Surface (TF12) lain in Remarks) c.

Hydrology Photos



Vegetation Photos



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mo	ontgomery (	County		Sampling Date: 2	2022-July-19	
Applicant/Owner: S	uneast				State	e: NY		Sampling Point: W-	MLM-04_UPI	1
Investigator(s): Mela	nie Musarra			S	ection, Tow	nship, Ran	ge:			
Landform (hillslope, te	rrace, etc.):	Flat		Local rel	lief (concav	e, convex, i	none):	None	Slope (%	): 1 to 3
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		Li	at: 42.8447	73	Long:	-74.4617515	Datum:	NGS84
Soil Map Unit Name:	ApB - Applet	on silt loam, 3 to	8 percent slo	pes				NWI classificat	ti <b>on:</b> None	
Are climatic/hydrologic	conditions o	n the site typical	for this time o	of year?	Yes	🖊 No	_ (If no	, explain in Remark	s.)	
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	_ 0	y disturbed? roblematic?				ances" present? y answers in Remar	Yes N ks.)	0 🟒

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒										
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland? Yes No									
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site ID:									
Remarks: (Explain alternative procedures here or in a separate report)											
Covertype is UPL. Area is upland, not all three wetland parameters are present. Circumstances are not normal due to agricultural activities.											

#### HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of	one is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial In</li> <li>Sparsely Vegetated Concave Statement</li> </ul>	— Aquati — Marl D — Hydro, — Oxidiz — Preser — Recent — Thin M magery (B7) — Other	Stained Leaves (B9) ic Fauna (B13) peposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) 1uck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations: Surface Water Present?	Yes No 🟒	Depth (inches):			
Water Table Present? Saturation Present?	Yes No 🟒 Yes No 🟒	Depth (inches): Depth (inches):	_ Wetland Hydrology Present? Yes № _∠ _		
(includes capillary fringe)					
Remarks: The criterion for wetland hydrolo		erial photos, previous inspections), if			

VEGETATION -- Use scientific names of plants.

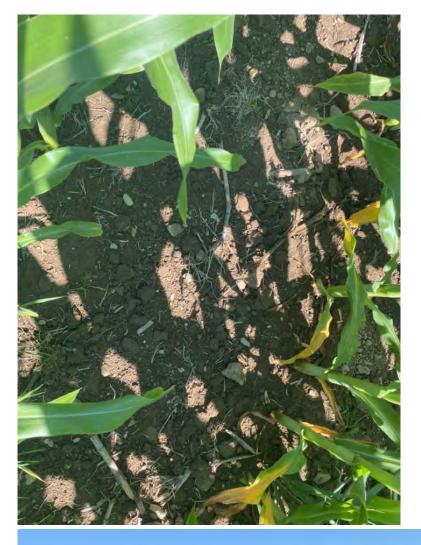
Sampling Point: W-MLM-04\_UPL-1

<u>Free Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	0	(A)
				Are OBL, FACW, or FAC:		(A)
				Total Number of Dominant Species	1	(B)
·				Percent of Dominant Species That	0	(A/B)
j				Are OBL, FACW, or FAC:		
j				Prevalence Index worksheet:		_
		·		- <u>Total % Cover of:</u>	<u>Multiply</u>	-
	0	= Total Cov	er	- OBL species 0	x 1 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		_		FACW species 10	x 2 =	20
				FAC species 0	x 3 =	0
				- FACU species 0	x 4 =	0
3.		·		UPL species 90	x 5 =	450
		<u> </u>		- Column Totals 100	(A)	470 (B)
				Prevalence Index = B/A =	4.7	
				Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetatior	ı
·				2 - Dominance Test is > 50%	- egetation	•
	0	= Total Cov	er	$3 - Prevalence Index is \le 3.0^1$		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adaptations	1 (Provida	supporting
. Zea mays	90	Yes	UPL	- data in Remarks or on a separate s		supporting
2. Phalaris arundinacea	10	No	FACW	<ul> <li>Problematic Hydrophytic Vege</li> </ul>		(niclay
3.				<sup>1</sup> Indicators of hydric soil and wetlar		
1				present, unless disturbed or proble		gy must be
5.		<u> </u>		· · · ·	matic	
5 5		<u> </u>		Definitions of Vegetation Strata:		
		<u> </u>		Tree – Woody plants 3 in. (7.6 cm) c		diameter a
		<u> </u>		breast height (DBH), regardless of h	-	
3				Sapling/shrub – Woody plants less		DBH and
9				greater than or equal to 3.28 ft (1 n		
10				Herb – All herbaceous (non-woody)		gardless of
11				size, and woody plants less than 3.2		
12.				Woody vines – All woody vines grea	iter than 3	.28 ft in
	100	= Total Cov	er	height.		
<u> Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetation Present?	Yes I	No 🖌
1.						
2.		·		-		
3.		<u> </u>		-		
		·		-		
4				-		
	0	= Total Cov	er			

SOIL

(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 5	10YR 3/4	100		_			Loam		
·		·							
·		·							
				_					
	oncentration, D = [	Depletio	n, RM = Reduced	Matr	rix, MS =	Masked Sand G			ore Lining, M = Matrix.
l <b>ydric Soil I</b> Histosol			Polyvalue Bel						r Problematic Hydric Soils³: ck (A10) <b>(LRR K, L, MLRA 149B)</b>
Black His Hydroge Stratifiec Depletec Thick Da Sandy M Sandy Gi Sandy Re Stripped	n Sulfide (A4) I Layers (A5) I Below Dark Surfa rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6)	ace (A11)	Depleted Dar Redox Depre	/ Min d Mat crix (F urfac k Sur	eral (F1) trix (F2) 3) te (F6) face (F7)	(LRR K, L)		5 cm Muu Dark Suri Polyvalue Thin Darl Iron-Man Piedmon Mesic Sp Red Pare Very Shal	airie Redox (A16) (LRR K, L, R) cky Peat or Peat (S3) (LRR K, L, R) face (S7) (LRR K, L) e Below Surface (S8) (LRR K, L) k Surface (S9) (LRR K, L) iganese Masses (F12) (LRR K, L, R) t Floodplain Soils (F19) (MLRA 149B) odic (TA6) (MLRA 144A, 145, 149B) nt Material (F21) llow Dark Surface (TF12) eplain in Remarks)
Dark Sur	face (S7) <b>(LRR R, M</b>								
Indicators o	of hydrophytic vege		and wetland hydr	ology	/ must b	e present, unles	s disturbed	or problema	itic.
<sup>a</sup> Indicators c Restrictive L	of hydrophytic vege ayer (if observed):		-	ology	/ must b			•	
Indicators c Restrictive L	of hydrophytic vega <b>ayer (if observed):</b> Гуре:		Rock	ology	/ must b	e present, unless Hydric Soil Pres		•	No∕_
Indicators c Restrictive L I Remarks:	of hydrophytic vege ayer (if observed):		Rock 5	ology	/ must b			•	

Hydrology Photos



Vegetation Photos



US Army Corps of Engineers

Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, M	lontg	omery County		Sampling Date:	2022-July-19	
Applicant/Owner: Si	uneast					State: NY		Sampling Point: <u>\</u>	W-MLM-04_UPL	-2
Investigator(s): Mela	nie Musarra				Sect	ion, Township, Ra	nge:			
Landform (hillslope, te	rrace, etc.):	Flat		Local re	elief	(concave, convex,	, none):	Undulating	Slope (%)	: 1 to 3
Subregion (LRR or MLR	RA): MLR	A 144A of LRR R			Lat:	42.8435269697	Long:	-74.4615648696	Datum: V	VGS84
Soil Map Unit Name:	Ma - Madalii	n silty clay loam						NWI classific	ation:	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)										
		or Hydrology or Hydrology	0	5				ances" present? y answers in Rem	Yes <b>_∠</b> No arks.)	

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒										
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒								
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:									
Remarks: (Explain alternative procedures here or in a separate report)											
Covertype is UPL. Area is upland, not all three wetland parameters are present.											

#### HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of on	e is required; check all that apply)	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Sur</li> </ul>		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No       Depth (inches):         Yes No       Depth (inches):         Yes No       Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream ga	uge, monitoring well, aerial photos, previous inspections), if	available:
Remarks: The criterion for wetland hydrology	is not met.	

L

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-04\_UPL-2

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test wor Number of Dominan		1		
. Pinus strobus	80	Yes	FACU	Are OBL, FACW, or FA	AC:		(A)	
Tsuga canadensis	20	Yes	FACU	Total Number of Dor Across All Strata:	ninant Species	4	(B)	
	Percent of Dominant Species Th			25	(A/B)			
				Total % Cov		Multiply	Bv:	
				- OBL species	0	x 1 =	 0	
	100	= Total Cov	er	FACW species	0	x 2 =	0	
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	20	x 3 =	60	
				FACU species	130	x 4 =	520	
				UPL species	0	x 5 =	0	
				Column Totals	150	(A)	580 (B	
					e Index = B/A =	3.9		
				Hydrophytic Vegetati	ion Indicators:		<u> </u>	
						egetatio	n	
				<ul> <li>1 - Rapid Test for Hydrophytic Vegetation</li> <li>2 - Dominance Test is &gt; 50%</li> </ul>				
	0	= Total Cov	er	3 - Prevalence I				
<u>erb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphologic		(Provide	supportin	
Aralia nudicaulis	30	Yes	FACU	data in Remarks or o				
Dryopteris intermedia	20	Yes	FAC	Problematic Hy	drophytic Veget	tation¹ (E	xplain)	
				<sup>1</sup> Indicators of hydric	soil and wetland	d hydrolo	ogy must b	
				present, unless distu	irbed or probler	natic		
				Definitions of Vegeta	ition Strata:			
				Tree – Woody plants	3 in. (7.6 cm) or	more in	diameter a	
				breast height (DBH),	-	-		
				Sapling/shrub – Woo			DBH and	
				greater than or equa				
0				Herb – All herbaceou			egardless o	
1				size, and woody plan			20 ft in	
2				Woody vines – All wo height.	ouy villes great		0.20 IUIII	
	50	= Total Cov	er			,		
/oody Vine Stratum (Plot size: <u>30 ft</u> )				Hydrophytic Vegeta	tion Present?	'es	NO 🟒	
		·						
		·		•				
	0	= Total Cov	er	•				
	-	-						

SOIL

Depth	Matrix		Redox				or confirm the a		
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Textu	re	Remarks
0 - 7	10YR 3/3	100					Fibric P	eat	
7 - 12	2.5Y 7/2	100					Loamy S	and	
				·			,		
				-					
					<u> </u>		-		
<u> </u>					·				
				-	<u> </u>				
				-					
<u> </u>				-					
				· —	. <u> </u>				
<u> </u>				·	. <u> </u>				
				-					
· ·	Concentration, D =	Depletic	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L		ore Lining, M = Matrix.
	Indicators:							Indicators for	Problematic Hydric Soils <sup>3</sup> :
_ Histosol			Polyvalue Bel		-			2 cm Muc	k (A10) <b>(LRR K, L, MLRA 149B)</b>
	pipedon (A2)		Thin Dark Su					Coast Prai	irie Redox (A16) <b>(LRR K, L, R)</b>
Black Hi			Loamy Mucky			(LRR K, L	.)	5 cm Muc	ky Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye					Dark Surfa	ace (S7) <b>(LRR K, L)</b>
-	d Layers (A5) d Below Dark Surfa		Depleted Mat					Polyvalue	Below Surface (S8) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Dark					Thin Dark	Surface (S9) <b>(LRR K, L)</b>
-	Aucky Mineral (S1)		Redox Depre					Iron-Mang	ganese Masses (F12) <b>(LRR K, L, R)</b>
	Gleyed Matrix (S4)			55101	13 (10)			Piedmont	Floodplain Soils (F19) (MLRA 149B)
	Sieyeu Watin (34)							Masis Coa	odic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	-							iviesic spo	uic (1A0) (IVIERA 144A, 143, 143D)
_ Sandy R	Redox (S5)							Red Parer	nt Material (F21)
_ Sandy R _ Stripped	Redox (S5) d Matrix (S6)		ופנ					Red Paren Very Shall	nt Material (F21) ow Dark Surface (TF12)
_ Sandy R _ Stripped	Redox (S5)	/LRA 149	9B)					Red Paren Very Shall	nt Material (F21)
_ Sandy R _ Stripped _ Dark Su	Redox (S5) d Matrix (S6)			olog	y must be	e presen	t, unless disturbe	Red Paren Very Shall Other (Exp	nt Material (F21) ow Dark Surface (TF12) olain in Remarks)
_ Sandy R _ Stripped _ Dark Su ndicators	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b>	getation		olog	y must be	e presen	t, unless disturbe	Red Paren Very Shall Other (Exp	nt Material (F21) ow Dark Surface (TF12) olain in Remarks)
_ Sandy R _ Stripped _ Dark Su ndicators	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg	getation		olog	y must be		t, unless disturbe Soil Present?	Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks)
_ Sandy R _ Stripped _ Dark Su ndicators estrictive I	Redox (S5) d Matrix (S6) nrface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed):	getation	and wetland hydr	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su ndicators estrictive I	Redox (S5) d Matrix (S6) nrface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type:	getation	and wetland hydr	olog	y must ba			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I	Redox (S5) d Matrix (S6) nrface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type:	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I marks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None		y must bi			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I marks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None		y must bi			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must bi			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	<u>olog</u>	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I marks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None		y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
Sandy R Stripped Dark Su dicators strictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su dicators strictive I marks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	<u>olog</u>	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su adicators estrictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su ndicators estrictive I eemarks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
Sandy R Stripped Dark Su ndicators estrictive I eemarks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
Sandy R Stripped Dark Su ndicators estrictive I eemarks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su ndicators estrictive I emarks:	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy R _ Stripped _ Dark Su adicators estrictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
Sandy R Stripped Dark Su dicators strictive I	Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, N</b> of hydrophytic veg Layer (if observed): Type: Depth (inches):	etation a	and wetland hydr None	olog	y must be			Red Paren Very Shall Other (Exp d or problemat	nt Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.

Hydrology Photos



Vegetation Photos



US Army Corps of Engineers

Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

#### Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County: Sprake	ers, Mont	gomery County		Sampling Date:	2022-July-08
Applicant/Owner: S	uneast				State: NY		Sampling Point: <u>N</u>	/-MLM-05_PFO-1
Investigator(s): Mela	anie Musarra			Sect	ion, Township, Ra	nge:		
Landform (hillslope, te	rrace, etc.):	Depression	Lo	ocal relief	(concave, convex,	none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		Lat:	42.841317	Long:	-74.4600936667	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	on silt loam, 3 to	8 percent slopes				NWI classifica	ation: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time of year	?	Yes 🟒 No 🔄	(If no	, explain in Remarl	ks.)
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	significantly distu naturally problen				tances" present? y answers in Rema	Yes 🟒 No rks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-MLM-05
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PFO. Area is wetland, all three v	vetland parameters are p	resent.	

#### HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum o	of one is required; check a	<u>ll that apply)</u>		Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aeria</li> <li>Sparsely Vegetated Concav</li> </ul>	— Aqua — Aqua — Hydr — Oxid — Pres — Rece — Thin I Imagery (B7) — Othe	er-Stained Leaves (B9) atic Fauna (B13) I Deposits (B15) rogen Sulfide Odor (C1) lized Rhizospheres on Living ence of Reduced Iron (C4) ent Iron Reduction in Tilled So Muck Surface (C7) er (Explain in Remarks)		<ul> <li> Surface Soil Cracks (B6)</li> <li> Drainage Patterns (B10)</li> <li> Moss Trim Lines (B16)</li> <li> Dry-Season Water Table (C2)</li> <li> Crayfish Burrows (C8)</li> <li> Saturation Visible on Aerial Imagery (C9)</li> <li> Stunted or Stressed Plants (D1)</li> <li> Geomorphic Position (D2)</li> <li> Shallow Aquitard (D3)</li> <li> Microtopographic Relief (D4)</li> <li> FAC-Neutral Test (D5)</li> </ul>		
Field Observations:						
Surface Water Present?	Yes No 🟒	Depth (inches):		_		
Water Table Present?	Yes 🟒 No	Depth (inches):	1	Wetland Hydrology Present? Yes No		
Saturation Present?	Yes 🟒 No	Depth (inches):	0			
(includes capillary fringe)						
Describe Recorded Data (strea	im gauge, monitoring well,	, aerial photos, previous insp	ections), if	available:		
The criterion for wetland hydro	ology is met.					

# VEGETATION -- Use scientific names of plants.

## Sampling Point: W-MLM-05\_PFO-1

ree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species Th	nat 3	/ A \
. Betula alleghaniensis	60	Yes	FAC	Are OBL, FACW, or FAC:		(A)
. Acer rubrum	20	Yes	FAC	Total Number of Dominant Spec	ies 3	(B)
. Fraxinus pennsylvanica	10	No	FACW	Across All Strata:		(8)
. Tsuga canadensis	10	No	FACU	<ul> <li>Percent of Dominant Species Th</li> <li>Are OBL, FACW, or FAC:</li> </ul>	<sup>at</sup> 100	) (A/B)
				Prevalence Index worksheet:		
·				Total % Cover of:	Multiply	<u> By:</u>
·				OBL species 0	x 1 =	0
	100	= Total Cov	er	FACW species 23	x 2 =	46
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 80	x 3 =	240
. Fraxinus pennsylvanica	10	Yes	FACW	FACU species 10	x 4 =	40
				UPL species 0	x 5 =	0
				Column Totals 113	(A)	326 (B)
				Prevalence Index = B//		320 (B
						·
				Hydrophytic Vegetation Indicato		_
				1- Rapid Test for Hydrophy	-	n
	10	= Total Cov	er	2 - Dominance Test is >50%		
erb Stratum (Plot size: <u>5 ft</u> )				$▲$ 3 - Prevalence Index is $\le$ 3.		
. Onoclea sensibilis	3	No	FACW	4 - Morphological Adaptati	-	supportin
				- data in Remarks or on a separat		valaia)
				<ul> <li>Problematic Hydrophytic V</li> <li><sup>1</sup>Indicators of hydric soil and we</li> </ul>		
				present, unless disturbed or pro	,	bgy must be
·						
· · · · · · · · · · · · · · · · · · ·				Definitions of Vegetation Strata:		
· _				Tree – Woody plants 3 in. (7.6 cn breast height (DBH), regardless	-	diameter a
				Sapling/shrub – Woody plants le	-	DBH and
				greater than or equal to 3.28 ft (		DDITAIIU
·				Herb – All herbaceous (non-woo		ogardless o
0				size, and woody plants less than		.gui uless o
1				Woody vines – All woody vines g		8.28 ft in
2				height.		
	3	= Total Cov	er	Hydrophytic Vegetation Present	7 Vac 1	No
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )					.; ics <u>/</u>	
•						
				.		
	0	= Total Cov	er			

SOIL

Depth	cription: (Describe Matrix	to the d	epth needed to de Redox			indicato	or confirm the al	usence of Indi	calors.)
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	2	Remarks
0 - 6	10YR 3/1	100			туре		Mucky Pe		Remarks
6 - 18	10YR 2/1	97	10YR 5/6	2	С	M	Clay		
0-18	1018 2/1		101K 5/0	2			Clay		
				—					
				—					
				—					
				—					
				—					
				—					
				_					
				_					
'Type: C = C	Concentration, D =	Depletic	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> Lo	ocation: PL = P	Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators fo	or Problematic Hydric Soils <sup>3</sup> :
Histoso			Polyvalue Bel					2 cm Mu	ick (A10) <b>(LRR K, L, MLRA 149B)</b>
	pipedon (A2)		Thin Dark Su						airie Redox (A16) <b>(LRR K, L, R)</b>
	istic (A3)		Loamy Mucky			(LRR K, I	_)	5 cm Mu	icky Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye					Dark Sur	face (S7) <b>(LRR K, L)</b>
	d Layers (A5)	( \ 1 1	Depleted Mat					Polyvalue	e Below Surface (S8) <b>(LRR K, L)</b>
	d Below Dark Surfa ark Surface (A12)	ace (ATT	Depleted Dark S					Thin Dar	k Surface (S9) <b>(LRR K, L)</b>
	Aucky Mineral (S1)		Redox Depre			)		Iron-Mar	nganese Masses (F12) <b>(LRR K, L, R)</b>
			Redux Depre	55101	IS (FO)			Piedmon	nt Floodplain Soils (F19) <b>(MLRA 149B)</b>
	Gleyed Matrix (S4)							Mesic Sp	oodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
	Redox (S5)							Red Pare	ent Material (F21)
	d Matrix (S6)		0.00					Very Sha	llow Dark Surface (TF12)
Dark Su	Irface (S7) <b>(LRR R, N</b>	ILKA 14	96)					Other (Ex	xplain in Remarks)
<sup>3</sup> Indicators	of hydrophytic veg	etation	and wetland hydr	olog	y must b	e preser	it, unless disturbe	d or problema	atic.
Restrictive	Layer (if observed)	:							
	Туре:		None			Hydric	Soil Present?	Y	res No
	Depth (inches):	-							
Remarks:	<u> </u>								
	ndication of hydric	soil was	observed.						

Hydrology Photos



Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montg	gomery County	Sampling Date: 202	2-July-08
Applicant/Owner: Suneast		State: NY	Sampling Point: W-ML	.M-05_UPL-1
Investigator(s): Melanie Musarra	Sect	ion, Township, Range:		
Landform (hillslope, terrace, etc.): Flat	Local relief	(concave, convex, none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 144A	of LRR R Lat:	42.8412708333 Long:	-74.4601488333	Datum: WGS84
Soil Map Unit Name: ApB - Appleton silt l	loam, 3 to 8 percent slopes		NWI classification	1:
Are climatic/hydrologic conditions on the sit	ite typical for this time of year?	Yes 🟒 No (If no	o, explain in Remarks.)	
· ,	drology significantly disturbed? drology naturally problematic?	Are "Normal Circums (If needed, explain ar	tances" present?	/es No

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report)		
Covertype is UPL. Area is upland, not all three	e wetland parameters are	present.	

#### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of	one is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial I</li> <li>Sparsely Vegetated Concave</li> </ul>	Aquat Marl E Hydro Oxidiz Preser Recen Thin M magery (B7) Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) Auck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	_
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	
(includes capillary fringe)			
Remarks:		aerial photos, previous inspections), if	available.
	ogy is not met.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-05\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant	Indicator	Dominance Test works			
<u></u>	% Cover	Species?	Status	Number of Dominant S	•	2	(A)
. Acer rubrum	60	Yes	FAC	Are OBL, FACW, or FAC			
. <u>Tsuga canadensis</u>	40	Yes	FACU	Total Number of Domi Across All Strata:	nant Species	5	(B)
				<ul> <li>Percent of Dominant S</li> <li>Are OBL, FACW, or FAC</li> </ul>	•	40	(A/B)
				Prevalence Index work	sheet:		
				Total % Cover	of:	Multiply	<u>/ By:</u>
7				OBL species	0	x 1 = 0	
	100	= Total Cov	er	FACW species	0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	80	x 3 =	240
				FACU species	80	x 4 =	320
<u> </u>		·		UPL species	0	x 5 =	0
3				Column Totals	160	(A)	560 (B)
l				Prevalence li		3.5	
				Hydrophytic Vegetation	n Indicators:		
				1- Rapid Test for I		/egetatio	n
·				2 - Dominance Te		egetatio	
	0	= Total Cov	er	3 - Prevalence Inc			
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological		<sup>1</sup> (Provide	sunnorting
. Toxicodendron radicans	20	Yes	FAC	data in Remarks or on			sapporting
2. Adiantum pedatum	20	Yes	FACU	Problematic Hydr			xplain)
3. Polystichum acrostichoides	20	Yes	FACU	<sup>1</sup> Indicators of hydric so			
4				present, unless disturb	ed or proble	matic	0,
				Definitions of Vegetation	on Strata:		
5				Tree – Woody plants 3	in. (7.6 cm) oı	r more in	diameter a
7				breast height (DBH), re	gardless of h	eight.	
3				Sapling/shrub - Woody	/ plants less t	han 3 in.	DBH and
).				greater than or equal t	o 3.28 ft (1 m	) tall.	
0				Herb – All herbaceous			egardless of
I1				size, and woody plants le			
12				Woody vines – All woo	dy vines great	ter than 3	3.28 ft in
	60	= Total Cov	er	height.			
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetatic	n Present?	res	No 🟒
I							
2.							
3.							
4.		·					
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a sepa	(rate sheet )	-	-				

SOIL

inches)       Color (moist)       %       Color (moist)       %       Type!       Loc2       Texture       Remarks         0 - 6       10YR 2/1       98       10YR 5/6       2       C       M       Clay Loam
'dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         _ Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         _ Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)
Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L,         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Dark Surface (S7) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLRA         Sandy Redox (S5)       Sandy Redox (S5)       Red Parent Material (F21)         Stripped Matrix (S6)       Very Shallow Dark Surface (TF12)
_ Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
estrictive Layer (if observed):
Type: Rock Hydric Soil Present? Yes _∠_ No
Depth (inches): 6

Hydrology Photos



Vegetation Photos

Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



Photo of Sample Plot South

Photo of Sample Plot West



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County: Sprak	ers, Mont <u></u> و	gomery County		Sampling Date:	2022-July-11
Applicant/Owner: S	uneast				State: NY		Sampling Point: V	V-MLM-06_PFO-1
Investigator(s): Mela	anie Musarra			Sect	ion, Township, Ra	ange:		
Landform (hillslope, te	rrace, etc.):	Depression	L	Local relief	(concave, convex	, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLF	<b>≿A):</b> MLR	A 144A of LRR R		Lat:	42.8401015	Long:	-74.4601005	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	ton silt loam, 3 to	8 percent slopes				NWI classifica	ation: None
Are climatic/hydrologic	conditions o	n the site typical	for this time of yea	r?	Yes 🟒 No 🔄	(If no	, explain in Remar	ks.)
Are Vegetation, Are Vegetation,		or Hydrology or Hydrology	significantly dist naturally proble				tances" present? y answers in Rema	Yes 🟒 No arks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site ID:	W-MLM-06
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PFO. Area is wetland, all three v	vetland parameters are p	resent.	

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	<u>ne is required; check all tl</u>	hat apply)		Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Saturation (A3)</li> <li>Marl Deposits (B15)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>				<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes No _ 🖌	Depth (inches):	_	
Water Table Present?	Yes No	Depth (inches):		Wetland Hydrology Present? Yes No
Saturation Present?	Yes No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stream g	auge, monitoring well, ae	rial photos, previous inspe	ctions), if	available:
Remarks:				
The criterion for wetland hydrolog	y is met.			

# VEGETATION -- Use scientific names of plants.

## Sampling Point: W-MLM-06\_PFO-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test work Number of Dominant		1	
. Tsuga canadensis	40	Yes	FACU	Are OBL, FACW, or FA	с:	1	(A)
. Betula alleghaniensis	40	Yes	FAC	Total Number of Dom	inant Species	2	(B)
. Acer saccharum	10	No	FACU	Across All Strata:			(0)
. Carya ovata	10	No	FACU	<ul> <li>Percent of Dominant Species That</li> <li>Are OBL, FACW, or FAC:</li> </ul>		50	(A/B)
				Prevalence Index wor			
·				Total % Cove	<u>r of:</u>	<u>Multiply</u>	<u> By:</u>
·				OBL species	0	x 1 =	0
	100	= Total Cov	er	FACW species	0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	40	x 3 =	120
				FACU species	60	x 4 =	240
·				UPL species	0	x 5 =	0
		<u> </u>		Column Totals	100	(A)	360 (B)
·				Prevalence	Index = B/A =	3.6	<u>·</u> · ·
·				Hydrophytic Vegetatio	on Indicators:		
				1- Rapid Test for		egetatio	n
				2 - Dominance T		egetatio	
	0	= Total Cov	er	3 - Prevalence In			
<u>erb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphologica		(Provide	sunnortin
				data in Remarks or or	•		supportin
				Problematic Hyd			xplain)
·				<sup>1</sup> Indicators of hydric s			-
				present, unless distur			
				Definitions of Vegetat	•		
·				Tree – Woody plants 3		more in	diameter a
				breast height (DBH), r			
				Sapling/shrub - Wood			DBH and
				greater than or equal			
0				Herb – All herbaceous	s (non-woody)	plants, re	gardless o
1		·		size, and woody plant	s less than 3.2	8 ft tall.	
2.		<u> </u>		Woody vines - All woo	ody vines great	er than 3	3.28 ft in
	0	= Total Cov	or	height.			
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )	0			Hydrophytic Vegetati	on Present?	es 🖌	No
·		<u> </u>		•			
		·					
		·					
	0	= Total Cov	er				

SOIL

Depth       Matrix       Redox Features         (nches)       Color (molst)       %       Uppel       Loc2       Texture       Remarks         4-16       N.6/       60       10YR 2/1       100       10YR 7/6       40       Clay Loarn         4-16       N.6/       60       10YR 7/6       40       Clay	Profile Desci Depth	ription: (Describe Matrix	to the c	-			indicato	r or confirm the al	bsence of ind	dicators.)
0 - 4       10YR 2/1       100	· —		%				l oc²	Texture		Remarks
4 - 16       N 6/       60       10YR 7/6       40       Clay         Clay       Clay       Clay       Clay			·			Турс				Kemarks
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils?         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       Cast Prairie Redox (A16) (LRR K, L, MLRA 149B)         Histosol (A1)      Polyvalue Below Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, MLRA 149B)			·	10VR 7/6	40				<u> </u>	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S6)       Mesic Spodic (TA6) (MLRA 1449B)         Stripped Matrix (S6)       Other (Explain in Remarks)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes _/ No         Remarks:       None       Hydric Soil Present?       Yes _/ No	+ 10	11 0/		1011(770				City		
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Back Hatrix (F2)         Dark Surface (S7) (LRR R, MLRA 149B)       Weith Soils (F12) (LRR K, L)         Stratified Layers (A6)       Polyvalue Below Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Red Parent Material (F21)         Stripped Matrix (S6)       Weith Surface (S7) (LRR R, MLRA 149B)         Undicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:         Depth (inches):       None         Depth (inches):       Hydric Soil Present?         Yers       Yes No			·		·					
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)      2 cm Muck (A10) (LRR K, L, MLRA 149B)			·		·					
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Back Hatrix (F2)         Dark Surface (S7) (LRR R, MLRA 149B)       Weith Soils (F12) (LRR K, L)         Stratified Layers (A6)       Polyvalue Below Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Red Parent Material (F21)         Stripped Matrix (S6)       Weith Surface (S7) (LRR R, MLRA 149B)         Undicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:         Depth (inches):       None         Depth (inches):       Hydric Soil Present?         Yers       Yes No			·		·					
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Back Hatrix (F2)         Dark Surface (S7) (LRR R, MLRA 149B)       Weith Soils (F12) (LRR K, L)         Stratified Layers (A6)       Polyvalue Below Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Red Parent Material (F21)         Stripped Matrix (S6)       Weith Surface (S7) (LRR R, MLRA 149B)         Undicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type:         Depth (inches):       None         Depth (inches):       Hydric Soil Present?         Yers       Yes No			·							
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S6)       Mesic Spodic (TA6) (MLRA 1449B)         Stripped Matrix (S6)       Other (Explain in Remarks)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes _/ No         Remarks:       None       Hydric Soil Present?       Yes _/ No			·		·					
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S6)       Mesic Spodic (TA6) (MLRA 1449B)         Stripped Matrix (S6)       Other (Explain in Remarks)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes _/ No         Remarks:       None       Hydric Soil Present?       Yes _/ No			·		·					
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S6)       Mesic Spodic (TA6) (MLRA 1449B)         Stripped Matrix (S6)       Other (Explain in Remarks)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes _/ No         Remarks:       None       Hydric Soil Present?       Yes _/ No										
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Gleyed Matrix (S6)       Mesic Spodic (TA6) (MLRA 1449B)         Stripped Matrix (S6)       Other (Explain in Remarks)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes _/ No         Remarks:       None       Hydric Soil Present?       Yes _/ No										
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         ✓ Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Were Stufface (T12)         Dark Surface (S7) (LRR R, MLRA 149B)       Were Stufface (T51)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       None         Type:       None         Depth (inches):       Hydric Soil Present?       Yes No										
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         ✓ Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Stripped Matrix (S6)       Mesic Spodic (TA6) (MLRA 1449B)         Stripped Matrix (S6)       Mesic Spodic (TA6) (MLRA 1449B)         Dark Surface (S7) (LRR R, MLRA 149B)       Wery Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Indicators of problematic.         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         testrictive Layer (if observed):       Type:         Type:       None         Depth (inches):       Hydric Soil Present?         Yers       Yes No										
Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R, L, R)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         Sandy Redox (S5)       Stripped Matrix (S6)       Mesic Spodic (TA6) (MLRA 144B)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes No         Type:       None       Hydric Soil Present?       Yes No         Depth (inches):       None       Hydric Soil Present?       Yes No         Memory       None       Hydric Soil Present?       Yes No <td>Type: C = Co</td> <td>oncentration, D =</td> <td>Depleti</td> <td>on, RM = Reduced</td> <td>d Mat</td> <td>rix, MS =</td> <td>Masked</td> <td>Sand Grains. <sup>2</sup>L</td> <td>ocation: PL =</td> <td>Pore Lining, M = Matrix.</td>	Type: C = Co	oncentration, D =	Depleti	on, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L	ocation: PL =	Pore Lining, M = Matrix.
Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       S cm Mucky Peat or Peat (S3) (LRR K, L)	lydric Soil Ir	ndicators:							Indicators	for Problematic Hydric Soils <sup>3</sup> :
				•					2 cm M	luck (A10) <b>(LRR K, L, MLRA 149B)</b>
				-	-		(LRR K,	L)	5 cm M	lucky Peat or Peat (S3) <b>(LRR K, L, R)</b>
✓ Depleted Below Dark Surface (A11) Redox Dark Surface (F6)     Thick Dark Surface (A12) Depleted Dark Surface (F7)     Sandy Mucky Mineral (S1) Redox Depressions (F8)     Sandy Gleyed Matrix (S4)     Sandy Redox (S5)     Stripped Matrix (S6)     Dark Surface (S7) (LRR R, MLRA 149B)     Very Shallow Dark Surface (TF12)     Other (Explain in Remarks)     Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.     Restrictive Layer (if observed):     Type: None Hydric Soil Present?     Yes No     Depth (inches):     Remarks:									Dark Si	urface (S7) <b>(LRR K, L)</b>
			(11						Polyval	ue Below Surface (S8) <b>(LRR K, L)</b>
			ace (AT				`		Thin Da	ark Surface (S9) <b>(LRR K, L)</b>
				!			)		Iron-Ma	anganese Masses (F12) <b>(LRR K, L, R)</b>
	-	-			255101	15 (FO)			Piedmo	ont Floodplain Soils (F19) <b>(MLRA 149B)</b>
	-								Mesic S	Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
	-								Red Pa	rent Material (F21)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):         Type:       None         Depth (inches):         Remarks:				100)					Very Sh	nallow Dark Surface (TF12)
Restrictive Layer (if observed):     Hydric Soil Present?     Yes _ No       Type:     None     Hydric Soil Present?     Yes _ No       Depth (inches):     Remarks:     None     None	Dark Sur	Tace (57) <b>(LKK K, F</b>	VILKA 14	+9D)					Other (	Explain in Remarks)
Type:     None       Depth (inches):     Hydric Soil Present?       Remarks:     Yes _ / No	Indicators o	f hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	d or problen	natic.
Depth (inches):	Restrictive La	ayer (if observed)	:							
Remarks:	Т	ype:		None			Hydric	Soil Present?	Y	′es No
lemarks:	[	Depth (inches):			•		-			
					·		I		· · ·	
		dication of hydric	soil wa	s observed						
	positive in		5011 110	5 00501 ved.						

Hydrology Photos



Vegetation Photos



US Army Corps of Engineers

Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t <u>C</u>	i <b>ty/County:</b> Spraker	s, Mont	gomery County		Sampling Date:	2022-July-11
Applicant/Owner: S	uneast				State: NY		Sampling Point: V	V-MLM-06_UPL-1
Investigator(s): Mela	anie Musarra			Sect	ion, Township, Ra	inge:		
Landform (hillslope, te	errace, etc.):	Flat	Loc	al relief	(concave, convex	, none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		Lat:	42.840133	Long:	-74.4601508333	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	on silt loam, 3 to	8 percent slopes				NWI classifica	ation:
Are climatic/hydrologic	c conditions o	n the site typical f	or this time of year?		Yes 🟒 No \_	(If no	, explain in Remar	ks.)
Are Vegetation, Are Vegetation,		, 0,	_ significantly distur _ naturally problem				tances" present? y answers in Rema	Yes 🟒 No arks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒									
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒							
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:								
Remarks: (Explain alternative procedures her	e or in a separate report	)								
Covertype is UPL. Area is upland, not all three	Covertype is UPL. Area is upland, not all three wetland parameters are present.									

### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	ne is required; check all t	that apply)	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Survey</li> </ul>		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>	
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No _ <b>∠</b> Yes No _ <b>∠</b> Yes No _ <b>∠</b>	Depth (inches): Depth (inches): Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)			-
Describe Recorded Data (stream g	auge, monitoring well, a	erial photos, previous inspections), if	available:
The criterion for wetland hydrolog	y is not met.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-06\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test work		0	(4)
. Tsuga canadensis	60	Yes	FACU	Are OBL, FACW, or FA	C:	0	(A)
. Acer saccharum	40	Yes	FACU	Total Number of Dom Across All Strata:	ninant Species	2	(B)
k				Percent of Dominant Are OBL, FACW, or FA	•	0	(A/B)
		·		Prevalence Index wor	ksheet:		
		············ ·		Total % Cove	er of:	Multiply	<u>' By:</u>
·		·		OBL species	0	x 1 =	0
	100	= Total Cov	er	FACW species	0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
				FACU species	100	x 4 =	400
		·		UPL species	0	x 5 =	0
				Column Totals	100	(A)	400 (B)
				Prevalence	Index = B/A =		
·				Hydrophytic Vegetati	on Indicators:		
·				1- Rapid Test for		egetatio	n
·				2 - Dominance 1		0800000	
	0	= Total Cov	er	3 - Prevalence Ir			
erb Stratum (Plot size: <u>5 ft</u> )				4 - Morphologic		(Provide	supportin
		·		data in Remarks or o			
				Problematic Hyd			xplain)
				<sup>1</sup> Indicators of hydric s			
				present, unless distu			0,
				Definitions of Vegetat	tion Strata:		
				Tree – Woody plants	3 in. (7.6 cm) or	more in	diameter a
				breast height (DBH), i	egardless of h	eight.	
				Sapling/shrub - Wood	dy plants less th	nan 3 in.	DBH and
				greater than or equal	to 3.28 ft (1 m	) tall.	
0				Herb – All herbaceou	s (non-woody)	plants, re	gardless o
1				size, and woody plan	ts less than 3.2	8 ft tall.	
2.				Woody vines - All wo	ody vines great	er than 3	8.28 ft in
	0	= Total Cov	er	height.			
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetat	ion Present?	′es	No 🟒
·							
		· ·		•			
· · · · · · · · · · · · · · · · · · ·				•			
1		- Total Carr	or.				
	0	= Total Cov	ei	<u> </u>			

SOIL

Depth	Matrix		Redox	Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		ture	Remarks
0 - 3	10YR 6/2	100					Fibric S	ilt Loam	
		. <u> </u>							
		Depletic	n, RM = Reduced	Mat	rix, MS =	Masked Sand G	rains. <sup>2</sup> L		Lining, M = Matrix.
Hydric Soil								Indicators for Pr	oblematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Bel					2 cm Muck (/	A10) <b>(LRR K, L, MLRA 149B)</b>
'	pipedon (A2)		Thin Dark Sur					Coast Prairie	Redox (A16) <b>(LRR K, L, R)</b>
Black Hi	en Sulfide (A4)		Loamy Mucky	•		(LRR K, L)			Peat or Peat (S3) <b>(LRR K, L, R)</b>
	d Layers (A5)		Depleted Mat					Dark Surface	
	d Below Dark Surfa	ace (A11	•						low Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Dar	'k Su	rface (F7)	)			rface (S9) <b>(LRR K, L)</b> nese Masses (F12) <b>(LRR K, L, R)</b>
								iron-iviangar	iese Masses (FTZ) (LKK K, L, K)
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	าร (F8)			Diadmont El	odalain Soils (E10) (MI DA 1408)
	lucky Mineral (S1) Gleyed Matrix (S4)		Redox Depre	SSIO	רs (F8)				bodplain Soils (F19) <b>(MLRA 149B)</b>
Sandy G			Redox Depre	SSIO	רא (F8)			Mesic Spodio	: (TA6) <b>(MLRA 144A, 145, 149B)</b>
Sandy G Sandy R	ileyed Matrix (S4)		Redox Depre	SSIO	רs (F8)			Mesic Spodic Red Parent N	(TA6) <b>(MLRA 144A, 145, 149B)</b> //aterial (F21)
Sandy G Sandy R Stripped	bleyed Matrix (S4) edox (S5)	1LRA 14		SSIO	זא (F8)			Mesic Spodic Red Parent N	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12)
Sandy G Sandy R Stripped Dark Su	ileyed Matrix (S4) ledox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b>		9B)			e present, unles	s disturbe	Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12)
Sandy G Sandy R Stripped Dark Su Andicators	ileyed Matrix (S4) ledox (S5) d Matrix (S6) rface (S7) <b>(LRR R, M</b> of hydrophytic veg	etation	9B)			e present, unles	s disturbe	Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12)
Sandy G Sandy R Stripped Dark Su Plndicators Restrictive I	ileyed Matrix (S4) ledox (S5) d Matrix (S6) rface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>_ayer (if observed)</b> :	etation	<b>9B)</b> and wetland hydr					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	etation	9 <b>B)</b> and wetland hydr Root			e present, unles Hydric Soil Pre		Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I	ileyed Matrix (S4) ledox (S5) d Matrix (S6) rface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>_ayer (if observed)</b> :	etation	<b>9B)</b> and wetland hydr					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su ndicators estrictive I eemarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su PIndicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Plndicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su PIndicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Plndicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su PIndicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)
Sandy G Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	ileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type: Depth (inches):	etation -	9 <b>B)</b> and wetland hydr Root 3					Mesic Spodic Red Parent N Very Shallow Other (Expla	: (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) Dark Surface (TF12) in in Remarks)

Hydrology Photos



#### Soil Photos



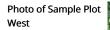
Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South





# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County: Sprake	rs, Mont	gomery County		Sampling Date:	2022-July-11
Applicant/Owner: S	uneast				State: NY		Sampling Point: V	V-MLM-07_PFO-1
Investigator(s): Mela	anie Musarra			Sect	tion, Township, Ra	nge:		
Landform (hillslope, te	errace, etc.):	Depression	Lo	cal relief	(concave, convex,	, none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		Lat:	42.8395899037	Long:	-74.4626162326	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	ton silt loam, 3 to	8 percent slopes				NWI classific	ation:
Are climatic/hydrologi	c conditions o	n the site typical	for this time of year?	I.	Yes 🟒 No 🔄	(If no	o, explain in Remar	·ks.)
Are Vegetation, Are Vegetation,		, 0,	significantly distu naturally problem				tances" present? y answers in Rema	Yes 🟒 No arks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-MLM-07
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PFO. Area is wetland, all three v	vetland parameters are p	resent.	

#### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of o	<u>ne is required; check all t</u>	<u>hat apply)</u>		Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Survival</li> </ul>	Aquatio Marl Do Hydrog Oxidize Presen Recent Thin M agery (B7) Other (	Stained Leaves (B9) Fauna (B13) eposits (B15) en Sulfide Odor (C1) ed Rhizospheres on Living ce of Reduced Iron (C4) Iron Reduction in Tilled Sc uck Surface (C7) Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		_
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes 🟒 No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stream g	auge, monitoring well, a	erial photos, previous insp	ections), if	available:
The criterion for wetland hydrolog	v is met			
	y is fried.			

# VEGETATION -- Use scientific names of plants.

## Sampling Point: W-MLM-07\_PFO-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species Tha	t 5	(4)
1. Tsuga canadensis	20	Yes	FACU	Are OBL, FACW, or FAC:	5	(A)
2. Acer rubrum	20	Yes	FAC	Total Number of Dominant Specie	s 6	(B)
3. Betula alleghaniensis	20	Yes	FAC	Across All Strata:		(D)
4.				Percent of Dominant Species That	83.3	(A/B)
5.				Are OBL, FACW, or FAC:		(, , , , , , , , , , , , , , , , , , ,
				Prevalence Index worksheet:		
7.	,			- <u>Total % Cover of:</u>	<u>Multiply E</u>	•
·	60	= Total Cov	er	- OBL species 0	x 1 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FACW species 30	x 2 =	60
1. Lindera benzoin	10	Yes	FACW	FAC species 60	x 3 =	180
2.		105	incir	FACU species 25	x 4 =	100
3				- UPL species 0	x 5 =	0
				- Column Totals 115	(A)	340 (B)
				Prevalence Index = B/A =	=	
				Hydrophytic Vegetation Indicators	:	
				1- Rapid Test for Hydrophytic	Vegetation	
7				2 - Dominance Test is >50%	0	
	10	= Total Cov	er	$\checkmark$ 3 - Prevalence Index is $\leq$ 3.0		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adaptation	ns¹ (Provide s	upporting
1. Onoclea sensibilis	20	Yes	FACW	- data in Remarks or on a separate		
2. <i>Toxicodendron radicans</i>	10	Yes	FAC	Problematic Hydrophytic Veg	getation <sup>1</sup> (Exp	olain)
3. Parthenocissus quinquefolia	5	No	FACU	<sup>1</sup> Indicators of hydric soil and wetla	ind hydrolog	y must be
4. <u>Acer rubrum</u>	5	No	FAC	present, unless disturbed or prob	ematic	-
5. Betula alleghaniensis	5	No	FAC	Definitions of Vegetation Strata:		
5				Tree – Woody plants 3 in. (7.6 cm)	or more in d	iameter a
7				breast height (DBH), regardless of	height.	
3				Sapling/shrub – Woody plants less	than 3 in. D	BH and
9				greater than or equal to 3.28 ft (1		
10				Herb – All herbaceous (non-woody		ardless of
11				size, and woody plants less than 3		
12.				Woody vines – All woody vines gre	ater than 3.2	28 ft in
	45	= Total Cov	er	height.		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )		•		Hydrophytic Vegetation Present?	Yes 🟒 N	0
1						
2.				-		
3.				-		
4.				-		
	0	= Total Cov	or	-		
	0	- 10101 CUV				

### SOIL

(inches)       Color (moist)       %       Type!       Loc2       Texture       Remarks         0-10       10/R2/1       90       10/R6/6       10       C       M       Clay         Image: Color (moist)       %       10/R6/6       10       C       M       Clay         Image: Color (moist)       %       10/R6/6       10       C       M       Clay         Image: Color (moist)       %       10/R6/6       10       C       M       Clay       Image: Color (moist)       M         Image: Color (moist)       %       10/R6/6       10       C       M       Clay       Image: Color (moist)       M       Image: Color (moist)       M       Image: Color (moist)       Image: Color (Color (moist)       Image: Color (Color (moist)       Image: Color (moist)       Image: Color	ion: (Describe to the depth needed to do Matrix Redox F
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix.         Indicators is:       Indicators for Problematic Hydric Soils         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F2)         Sandy Gleyed Matrix (S4)       Thin Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Depleted Dark Surface (F7)         Stripped Matrix (S6)       Redox Depressions (F8)         Stripped Matrix (S6)       Very Shallow Dark Surface (F7)         Jords Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (F7)         Stripped Matrix (S6)       Very Shallow Dark Surface (F12) (LR R, I)         Stripped Matrix (S6)       Very Shallow Dark Surface (F12)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (F12)         Other (Explain in Remarks)       Other (Explain in Remarks)         ndicators of hydrophytic vegetation and wetland hydrology must be present, un	Color (moist) % Color (moist)
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	10YR 2/1 90 10YR 6/6
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
vdric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils         _ Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)      2 cm Muck (A10) (LRR K, L, MLRA 149B)	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
ydric Soil Indicators:       Indicators for Problematic Hydric Soils	
Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (M         Sandy Redox (S5)       Stripped Matrix (S6)       Mesic Spodic (TA6) (MLRA 144A, 144         Stripped Matrix (S6)       Other (Explain in Remarks)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)         mdicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Yes _ No         Type:       None       Hydric Soil Present?       Yes _ No         Depth (inches):       Hydric Soil Present?       Yes _ No	entration, D = Depletion, RM = Reduced
	cators:
	;
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR R, MLRA 149B) Dother (Explain in Remarks) Dother (Explain in Remarks)   	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) mdicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type:NoneHydric Soil Present? Yes _✓_ No Depth (inches): emarks:	
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Indicators of hydrophytic vegetation and wetland hydrology must be present.         Type:       None         Depth (inches):       Hydric Soil Present?         Vegetation       Vegetation	
estrictive Layer (if observed): Type: None Hydric Soil Present? Yes ✓ No Depth (inches): emarks:	.e (S7) <b>(LRR R, MLRA 149B)</b>
estrictive Layer (if observed): Type: None Hydric Soil Present? Yes ✓ No Depth (inches): emarks:	ydrophytic vegetation and wetland hydro
Type: None Hydric Soil Present? Yes _ No Depth (inches): emarks:	
Depth (inches):	
emarks:	
	ation of hydric soil was observed
	ation of flydric soll was observed.

Hydrology Photos



Vegetation Photos

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgor	mery County	Sampling Date: 202	2-July-11
Applicant/Owner: Suneast		State: NY	Sampling Point: W-ML	_M-07_UPL-1
Investigator(s): Melanie Musarra	Section	n, Township, Range:		
Landform (hillslope, terrace, etc.): Flat	Local relief (co	oncave, convex, none):	None	Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 144A of L	RR R Lat: 42	2.8397333333 Long:	-74.4627273333	Datum: WGS84
Soil Map Unit Name: ApB - Appleton silt loan	n, 3 to 8 percent slopes		NWI classification	ו:
Are climatic/hydrologic conditions on the site ty	pical for this time of year?	Yes 🟒 No (If no	o, explain in Remarks.)	
	gy significantly disturbed? gy naturally problematic?	Are "Normal Circums (If needed, explain an	tances" present? y answers in Remarks.	Yes No )

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report	)	
Covertype is UPL. Area is upland, not all three	e wetland parameters are	e present.	

### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	one is required; check all t	<u>:hat apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ir</li> <li>Sparsely Vegetated Concave S</li> </ul>	— Aquati — Marl D — Hydrog — Oxidize — Preser — Recent — Thin M nagery (B7) — Other	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) ice of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	-
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	_
(includes capillary fringe)			
Remarks:		erial photos, previous inspections), if	
The criterion for wetland hydrolo	gy is not met.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-07\_UPL-1

60 30 10 10 100 10 10	 _= Total Cov Yes	er FACU	Number of Dominant Species TI         Are OBL, FACW, or FAC:         Total Number of Dominant Species         Across All Strata:         Percent of Dominant Species Th         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         OBL species       0         FACW species       0         FACU species       10         FACU species       0         Column Totals       120         Prevalence Index = B/       10	Multiply       x1 =       x2 =       x3 =       x4 =       x5 =       (A)	(A/B)
30 10 10 100 10	Yes No 	FACU FACU er FACU	Across All Strata:         Percent of Dominant Species Th         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         Total % Cover of:         OBL species       0         FACW species       0         FACU species       10         FACU species       110         UPL species       0         Column Totals       120         Prevalence Index = B/	A A A A A A A A A A A A A A	(C) (A/B) (A/B) 0 0 30 440 0
10 100 10		FACU er FACU	Percent of Dominant Species The Are OBL, FACW, or FAC: Prevalence Index worksheet: OBL species 0 FACW species 0 FAC species 10 FACU species 110 UPL species 0 Column Totals 120 Prevalence Index = B/	at 25 <u>Multiph</u> x 1 = x 2 = x 3 = x 4 = x 5 = (A)	(C) (A/B) (A/B) 0 0 30 440 0
100	= Total Cov Yes	er FACU	Are OBL, FACW, or FAC:         Prevalence Index worksheet:         Total % Cover of:         OBL species       0         FACW species       0         FAC species       10         FACU species       110         UPL species       0         Column Totals       120         Prevalence Index = B/	<u>Multiply</u> x 1 = x 2 = x 3 = x 4 = x 5 = (A)	<b>y By:</b> 0 0 30 440 0
100	= Total Cov Yes	er FACU	Total % Cover of:       OBL species     0       FACW species     0       FAC species     10       FACU species     110       UPL species     0       Column Totals     120       Prevalence Index = B/.	x 1 = x 2 = x 3 = x 4 = x 5 = (A)	0 0 30 440 0
100	= Total Cov Yes	er FACU	OBL species     0       FACW species     0       FAC species     10       FACU species     110       UPL species     0       Column Totals     120       Prevalence Index = B/.	x 1 = x 2 = x 3 = x 4 = x 5 = (A)	0 0 30 440 0
10	Yes	FACU	FACW species     0       FAC species     10       FACU species     110       UPL species     0       Column Totals     120       Prevalence Index = B/	x 2 = x 3 = x 4 = x 5 = (A)	0 30 440 0
10	Yes	FACU	FAC species     10       FACU species     110       UPL species     0       Column Totals     120       Prevalence Index = B/	x 3 = x 4 = x 5 = (A)	30 440 0
			FACU species     110       UPL species     0       Column Totals     120       Prevalence Index = B/.	x 4 = x 5 = (A)	440 0
			UPL species     0       Column Totals     120       Prevalence Index = B/.	x 5 = (A)	0
			Column Totals 120 Prevalence Index = B/.	(A)	
			Prevalence Index = B/		470 (B)
				A = <u>3.9</u>	
			Hydrophytic Vegetation Indicate	rs:	
10			1- Rapid Test for Hydrophy		n
10			2 - Dominance Test is > 50	•	
	= Total Cov	er	$3$ - Prevalence Index is $\leq 3$		
			4 - Morphological Adaptati		e supporting
10	Yes	FAC	data in Remarks or on a separat		-
			<b>v</b>		xplain)
				-	-
			present, unless disturbed or pro	blematic	
			Definitions of Vegetation Strata:		
			Tree – Woody plants 3 in. (7.6 cr	n) or more in	diameter a
			breast height (DBH), regardless	of height.	
			Sapling/shrub – Woody plants le	ss than 3 in.	DBH and
					egardless of
				reater than 3	3.28 ft in
10	= Total Cov	er	height.		
	-		Hydrophytic Vegetation Presen	t? Yes	No 🖌
·					
			·		
			-		
0	= Total Cov	er	•		
	0 sheet.)	10 = Total Cov 10 = Total Cov 0 = Total Cov sheet.)	10 = Total Cover		

SOIL

0 - 6         10YR 3/3		Texture     Remarks       ric Silt Loam
0 - 6 10YR 3/3		ric Silt Loam
ype: C = Concentration, D = Depletion, RN           rdric Soil Indicators:		
d <b>ric Soil Indicators:</b> _ Histosol (A1) P		
dric Soil Indicators: Histosol (A1) P		
Histosol (A1)		
dric Soil Indicators: Histosol (A1) P		
dric Soil Indicators: Histosol (A1) P		
dric Soil Indicators: Histosol (A1) P	I = Reduced Matrix, MS = Masked Sand Grains.	
dric Soil Indicators: Histosol (A1) P	I = Reduced Matrix, MS = Masked Sand Grains.	
dric Soil Indicators: Histosol (A1) P	I = Reduced Matrix, MS = Masked Sand Grains.	
dric Soil Indicators: Histosol (A1) P	I = Reduced Matrix, MS = Masked Sand Grains.	
dric Soil Indicators: Histosol (A1) P	I = Reduced Matrix, MS = Masked Sand Grains.	
dric Soil Indicators: Histosol (A1) P	I = Reduced Matrix, MS = Masked Sand Grains.	
dric Soil Indicators: Histosol (A1) P	1 = Reduced Matrix, MS = Masked Sand Grains.	
Histosol (A1) P		
. ,		Indicators for Problematic Hydric Soils <sup>3</sup> :
Llistic Eninodon (A2)	olyvalue Below Surface (S8) (LRR R, MLRA 149B	
	hin Dark Surface (S9) <b>(LRR R, MLRA 149B)</b> oamy Mucky Mineral (F1) <b>(LRR K, L)</b>	Coast Prairie Redox (A16) <b>(LRR K, L, R)</b>
· · · · <u> </u>	oamy Gleyed Matrix (F2)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	epleted Matrix (F3)	Dark Surface (S7) (LRR K, L)
Depleted Below Dark Surface (A11) R		Polyvalue Below Surface (S8) (LRR K, L)
Thick Dark Surface (A12)	epleted Dark Surface (F7)	Thin Dark Surface (S9) (LRR K, L)
_Sandy Mucky Mineral (S1) F	edox Depressions (F8)	Iron-Manganese Masses (F12) <b>(LRR K, L, R)</b> Piedmont Floodplain Soils (F19) <b>(MLRA 149B</b> )
_Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_ Sandy Redox (S5)		Red Parent Material (F21)
_ Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
_ Dark Surface (S7) (LRR R, MLRA 149B)		Other (Explain in Remarks)
disators of hydrophytic vegetation and y	utland budralage must be present uplace dist	
	etland hydrology must be present, unless distu I	
strictive Layer (if observed):	Not Hudric Soil Procent?	Yes No _∠_
	Hydric Soil Present?	fes NO
Depth (inches): marks:	6	

Hydrology Photos



Vegetation Photos



Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County: Sprake	rs, Mont	gomery County		Sampling Date:	2022-July-11
Applicant/Owner: S	uneast				State: NY		Sampling Point: V	V-MLM-08_PFO-1
Investigator(s): Mela	anie Musarra			Sect	tion, Township, Ra	nge:		
Landform (hillslope, te	rrace, etc.):	Depression	Lo	cal relief	(concave, convex,	none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	<b>≀A):</b> MLR	A 144A of LRR R		Lat:	42.8399738333	Long:	-74.463269	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	ton silt loam, 3 to	8 percent slopes				NWI classifica	ation: None
Are climatic/hydrologic	: conditions o	n the site typical	for this time of year?	,	Yes 🟒 No 🔄	(If no	, explain in Remar	ks.)
Are Vegetation, Are Vegetation,		, 0, _	significantly distu naturally problem				tances" present? y answers in Rema	Yes 🟒 No Irks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-MLM-08
Remarks: (Explain alternative procedures he	re or in a separate report	)	
Covertype is PFO. Area is wetland, all three v	vetland parameters are p	resent.	

### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	ne is required; check all th	<u>at apply)</u>		Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Summary Sparsely Veget</li></ul>	Aquatic Marl Dej Hydroge Oxidized Presence Recent li Thin Mu agery (B7) Other (E	tained Leaves (B9) Fauna (B13) posits (B15) en Sulfide Odor (C1) I Rhizospheres on Living Ro e of Reduced Iron (C4) ron Reduction in Tilled Soils ck Surface (C7) xplain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		_
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stream g	auge, monitoring well, aer	ial photos, previous inspec	tions), if	available:
Remarks:				
The criterion for wetland hydrolog	y is met.			

# VEGETATION -- Use scientific names of plants.

## Sampling Point: W-MLM-08\_PFO-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	4	(4)
. Fraxinus pennsylvanica	40	Yes	FACW	Are OBL, FACW, or FAC:	4	(A)
. Tsuga canadensis	40	Yes	FACU	Total Number of Dominant Species	5	(B)
. Acer saccharum	10	No	FACU	Across All Strata:		(8)
				Percent of Dominant Species That	80	(A/B)
5.				Are OBL, FACW, or FAC:		
				Prevalence Index worksheet:		
· · · · · · · · · · · · · · · · · · ·				- <u>Total % Cover of:</u>	<u>Multiply</u>	•
·	90	= Total Cov	er	OBL species 0	x 1 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )			ci	FACW species 45	x 2 =	90
. Carpinus caroliniana	20	Yes	FAC	FAC species 25	x 3 =	75
. <u>Carpinus caroniniana</u>	20	163	FAC	FACU species 50	x 4 =	200
				UPL species 0	x 5 =	0
				Column Totals 120	(A)	365 (B)
				Prevalence Index = B/A =	3	
·				Hydrophytic Vegetation Indicators:		
•				1- Rapid Test for Hydrophytic		n
				2 - Dominance Test is >50%	- eBetatio	
	20	= Total Cov	er	$\checkmark$ 3 - Prevalence Index is $\leq 3.0^1$		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adaptations	s <sup>1</sup> (Provide	sunnortin
. Onoclea sensibilis	5	Yes	FACW	- data in Remarks or on a separate s	-	Supportin
. Toxicodendron radicans	5	Yes	FAC	Problematic Hydrophytic Veg		xplain)
3				<sup>1</sup> Indicators of hydric soil and wetla		
				present, unless disturbed or proble		, 6) mase s
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) c	or more in	diameter a
				breast height (DBH), regardless of l		
				Sapling/shrub – Woody plants less	-	DBH and
				greater than or equal to 3.28 ft (1 n		
0.				Herb – All herbaceous (non-woody	) plants, re	gardless o
1				size, and woody plants less than 3.	•	0
				Woody vines – All woody vines grea	ater than 3	8.28 ft in
2		Tabal Car		height.		
	10	= Total Cov	ei	Hydrophytic Vegetation Present?	Yes 🖌	No
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )						
				-		
). 				-		
3				-		
ł				-		
	0	= Total Cov	er			

SOIL

Depth Matrix			lepth needed to document the indicator or confirm the a Redox Features					sence of indicators.	•1
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 5	10YR 2/1	100					Fibric Mucky Peat		
5 - 12	10YR 2/1	98	10YR 6/6	2	С	М		lay	-
				_		<u> </u>			
<u> </u>				—					
				—		<u> </u>			
				—					
				—					
				—					
				—					
	Concentration, D =	Depletic	on, RM = Reduced	Mat	1x, MS =	Masked S	and Grains. <sup>2</sup> L	ocation: PL = Pore Li	*
	Indicators:					0.4555		Indicators for Prob	elematic Hydric Soils <sup>3</sup> :
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B)								0) (LRR K, L, MLRA 149B)	
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L)								edox (A16) <b>(LRR K, L, R)</b>	
Loamy Gleyed Matrix (F2)								•	at or Peat (S3) <b>(LRR K, L, R)</b>
Stratified Layers (A5) Depleted Matrix (F3)								Dark Surface (S	
Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)								Polyvalue Below Surface (S8) (LRR K, L)	
Thick Dark Surface (A12) Depleted Dark Surface (F7)								Thin Dark Surface (S9) (LRR K, L)	
Sandy Mucky Mineral (S1) Redox Depressions (F8)								-	se Masses (F12) (LRR K, L, R)
_ Sandy G	ileyed Matrix (S4)								dplain Soils (F19) <b>(MLRA 149B)</b>
_ Sandy R	edox (S5)							Red Parent Ma	FA6) <b>(MLRA 144A, 145, 149B)</b>
_ Stripped	d Matrix (S6)								ark Surface (TF12)
_ Dark Su	rface (S7) <b>(LRR R, N</b>	1LRA 149	9B)					Other (Explain	
	- f		برام برما المربي المربي المربي					•	,
	of hydrophytic veg		and wettand hydr	olog	y must be	e present	, unless disturbe	d or problematic.	
	_ayer (if observed): 								
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
emarks:	Depth (inches):								
	ndication of hydric								

Hydrology Photos



Vegetation Photos

Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t <u>C</u>	ity/County: Sprake	rs, Mont	gomery County		Sampling Date:	2022-July-11
Applicant/Owner: S	uneast				State: NY		Sampling Point: \	N-MLM-08_UPL-1
Investigator(s): Mela	anie Musarra			Sect	ion, Township, Ra	ange:		
Landform (hillslope, te	errace, etc.):	Flat	Lo	cal relief	(concave, convex	, none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): MLR	A 144A of LRR R		Lat:	42.840044	Long:	-74.4632425	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	on silt loam, 3 to	8 percent slopes				NWI classific	ation:
Are climatic/hydrologic	c conditions o	n the site typical f	or this time of year?		Yes 🟒 No 🔄	(If no	o, explain in Remai	rks.)
Are Vegetation, Are Vegetation,		, 0,	_ significantly distur _ naturally problem				tances" present? y answers in Rema	Yes 🟒 No arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

#### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum o	f one is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial</li> <li>Sparsely Vegetated Concave</li> </ul>	Aquat Marl E Hydro Oxidiz Presei Recen Thin M Imagery (B7) Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) Auck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	_
(includes capillary fringe)			_
Remarks:	n gauge, monitoring Well, a	aerial photos, previous inspections), if	สงสแสมเช.
The criterion for wetland hydro	logy is not met.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-MLM-08\_UPL-1

ree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test work		0	
. Tsuga canadensis	80	Yes	FACU	Are OBL, FACW, or FAC	C:	0	(A)
. Acer rubrum	10	No	FAC	Total Number of Dom Across All Strata:	inant Species	1	(B)
				Percent of Dominant S Are OBL, FACW, or FAC	•	0	(A/B)
				Prevalence Index wor			
				Total % Cove		Multiply	Bv:
				OBL species	0	x 1 =	 0
	90	= Total Cov	er	FACW species	0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	10	x 3 =	30
				FACU species	80	x 4 =	320
				UPL species	0	x 5 =	0
				Column Totals	90	(A)	350 (B)
·					Index = B/A =		
				Hydrophytic Vegetatic	on Indicators:		
·		·		1- Rapid Test for	Hydrophytic V	egetatio	n
				2 - Dominance Te	est is > 50%		
	0	= Total Cov	er	3 - Prevalence In	dex is $\leq 3.0^1$		
<u>erb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphologica	al Adaptations <sup>1</sup>	(Provide	supportin
·		·		data in Remarks or on			
·				Problematic Hyd	Irophytic Veget	ation <sup>1</sup> (E	xplain)
				<sup>1</sup> Indicators of hydric s	oil and wetland	d hydrolo	ogy must b
				present, unless distur			
•				Definitions of Vegetat	ion Strata:		
·				Tree – Woody plants 3	in. (7.6 cm) or	more in	diameter a
				breast height (DBH), r	egardless of h	eight.	
				Sapling/shrub - Wood	ly plants less tl	nan 3 in.	DBH and
				greater than or equal	to 3.28 ft (1 m	) tall.	
0		· ·		Herb – All herbaceous	(non-woody)	olants, re	gardless o
1				size, and woody plant	s less than 3.2	8 ft tall.	
2.	·			Woody vines - All woo	ody vines great	er than 3	8.28 ft in
	0	= Total Cov	er	height.			
Voody Vine Stratum (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetati	on Present?	′es	No 🟒
·		<u> </u>		•			
·		<u> </u>					
		·					
	0	= Total Cov	er	1			

SOIL

Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type!       Loc²       Texture       Remarks         0 - 6       10YR 2/1	
0 - 6       10YR 2/1       Image: Clay Loam         6 - 12       10YR 2/1       98       10YR 6/6       2       C       M       Clay         6 - 12       10YR 2/1       98       10YR 6/6       2       C       M       Clay         6 - 12       10YR 2/1       98       10YR 6/6       2       C       M       Clay         6 - 12       10YR 2/1       98       10YR 6/6       2       C       M       Clay         9       10YR 6/6       2       C       M       Clay       Image: Clay <th></th>	
6 - 12       10YR 2/1       98       10YR 6/6       2       C       M       Clay <ul> <li>Image: Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.</li> <li>Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</li> <li>Histosol (A1)</li> <li>Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</li> <li>Histosol (A1)</li> <li>Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</li> <li>Histosol (A1)</li> <li>Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</li> <li>Goard Prairie Redox (A16) (LRR K, L, MLRA 149B)</li> <li>Stratified Layers (A5)</li> <li>Depleted Matrix (F2)</li> <li>Depleted Matrix (F3)</li> <li>Sandy Mucky Mineral (S1)</li> <li>Redox Depressions (F8)</li> <li>Sandy Medry (S5)</li> </ul> <ul> <li>Thin Dark Surface (F7)</li> <li>Sandy Medry (S4)</li> <li>Sandy Medry (S5)</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, Sandy Bedry (S5)</li> </ul>	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       ?Location: PL = Pore Lining, M = Matrix.         ydric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils?:	
Adric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         _ Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         _ Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Depleted Matrix (F3)         _ Depleted Below Dark Surface (A11) /       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S1) (LRR K, L)         _ Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
Adric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         _ Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         _ Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Depleted Matrix (F3)         _ Depleted Below Dark Surface (A11) /       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S1) (LRR K, L)         _ Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
Adric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         _ Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         _ Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Depleted Matrix (F3)         _ Depleted Below Dark Surface (A11) /       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S1) (LRR K, L)         _ Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
Adric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         _ Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         _ Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Depleted Matrix (F3)         _ Depleted Below Dark Surface (A11) /       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S1) (LRR K, L)         _ Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
Adric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         _ Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         _ Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Depleted Matrix (F3)         _ Depleted Below Dark Surface (A11) /       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S1) (LRR K, L)         _ Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
dric Soil Indicators:       Indicators:         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)      Nedox Depressions (F8)         Thick Dark Surface (S1)      Redox Depressions (F8)         Sandy Gleyed Matrix (S4)      Redox (S5)	
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)       Thin Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)       Thin Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
Adric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         _ Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149E)         _ Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         _ Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Depleted Matrix (F3)         _ Depleted Below Dark Surface (A11) /       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S1) (LRR K, L)         _ Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)       Thin Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)       Thin Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149I)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (LRR K, I)         Depleted Below Dark Surface (A11) ✓       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S1) (LRR K, L)         Sandy Gleyed Matrix (S4)       Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
Histic Epipedon (A2)	
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)      Coast Prainte Redux (A10) (LRR K, L, K, L, K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)      S to m Mucky Peat or Peat (S3) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)      D Dark Surface (S3) (LRR K, L)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)      D Polyvalue Below Surface (S9) (LRR K, L)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)      Thin Dark Surface (S9) (LRR K, L)         Sandy Gleyed Matrix (S4)      Redox Depressions (F8)      Piedmont Floodplain Soils (F19) (MLR         Sandy Redox (S5)      Nesic Spodic (TA6) (MLRA 144A, 145, L)      Nesic Spodic (TA6) (MLRA 144A, 145, L)	
_ Hydrogen Sulfide (A4)       _ Loamy Gleyed Matrix (F2)       S trii Mucky Peat of Peat (S5) (LRR K, L)         _ Stratified Layers (A5)       Depleted Matrix (F3)       Dark Surface (S7) (LRR K, L)         _ Depleted Below Dark Surface (A11)        Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         _ Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A, 145,	
_ Stratified Layers (A5)       _ Depleted Matrix (F3)       _ Dark Surface (S7) (LRR K, L)         _ Depleted Below Dark Surface (A11)        _ Redox Dark Surface (F6)       _ Polyvalue Below Surface (S9) (LRR K, L)         _ Thick Dark Surface (A12)       _ Depleted Dark Surface (F7)       _ Thin Dark Surface (S9) (LRR K, L)         _ Sandy Mucky Mineral (S1)       _ Redox Depressions (F8)       _ Piedmont Floodplain Soils (F19) (MLR         _ Sandy Redox (S5)       _ Mesic Spodic (TA6) (MLRA 144A, 145,	L, R)
Depleted Below Dark Surface (A11)_       Redox Dark Surface (F6)       Polyvalue below Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F12) (LRR K, L)         Sandy Gleyed Matrix (S4)       Mesic Spodic (TA6) (MLRA 144A, 145, 145, 145, 145, 145, 145, 145, 145	
_ Inick Dark Surface (A12)       _ Depleted Dark Surface (F7)       _ Iron-Manganese Masses (F12) (LRR K,         _ Sandy Mucky Mineral (S1)       _ Redox Depressions (F8)       _ Piedmont Floodplain Soils (F19) (MLR         _ Sandy Gleyed Matrix (S4)       _ Mesic Spodic (TA6) (MLRA 144A, 145,	L)
_ Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLR _ Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145,	
_Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, Mesic Spodic (MLRA 144A, 145, Mesic	
Sandy Redox (S5)	
– Part December (CC) Pod Parent Material (E21)	1496)
Stripped Matrix (S6) Very Shallow Dark Surface (TF12)	
_ Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	
idicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
estrictive Layer (if observed):	
Type: None Hydric Soil Present? Yes ∠ No	
Depth (inches):	

Hydrology Photos



Vegetation Photos

#### Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2022-July-19
Applicant/Owner: Suneast	State: NY	Sampling Point: W-MLM-09_PFO-1
Investigator(s): Melanie Musarra	Section, Township, Range:	
Landform (hillslope, terrace, etc.): Depression	n Local relief (concave, convex, none	: Undulating Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 144A of LRR	Lat: 42.8404214098 Long	: -74.4634750782 Datum: WGS84
Soil Map Unit Name: ApB - Appleton silt loam, 3	3 to 8 percent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typic	cal for this time of year? Yes 🖌 No (If	no, explain in Remarks.)
	<ul> <li> significantly disturbed?</li> <li> naturally problematic?</li> <li> (If needed, explain a</li> </ul>	istances" present? Yes 🖌 No iny answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🧹 No						
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-MLM-09						
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PFO. Area is wetland, all three wetland parameters are present.									

### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	Secondary Indicators (minimum of two required)			
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Saturation (A3)</li> <li>Marl Deposits (B15)</li> <li>Water Marks (B1)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>				<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes No _	Depth (inches):		
Water Table Present?	Yes No _	Depth (inches):		Wetland Hydrology Present? Yes _ No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stream g	auge, monitoring well, ae	rial photos, previous inspe	ctions), if	available:
Remarks:				
The criterion for wetland hydrolog	y is met.			

# VEGETATION -- Use scientific names of plants.

### Sampling Point: W-MLM-09\_PFO-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test wor Number of Dominan		2	
. Fraxinus pennsylvanica	40	Yes	FACW	Are OBL, FACW, or FA		2	(A)
. Fagus grandifolia	15	Yes	FACU	Total Number of Dor	minant Species	4	(B)
. Tsuga canadensis	15	Yes	FACU	Across All Strata:			(2)
Acer saccharum	10	No	FACU	<ul> <li>Percent of Dominant</li> <li>Are OBL, FACW, or FA</li> </ul>	1	50	(A/B)
				Prevalence Index wo			
				- Total % Cov		Multiply	BV:
				- OBL species	0	x 1 =	 0
	80	= Total Cov	er	FACW species	45	x 2 =	90
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
				- FACU species	40	x 4 =	160
				- UPL species	0	x 5 =	0
				Column Totals	85	(A)	250 (B
		·			e Index = B/A =	2.9	
·		·		Hydrophytic Vegetat	ion Indicators:		
		·		1- Rapid Test fo		egetatio	n
				2 - Dominance		-	
	0	= Total Cov	er	🟒 3 - Prevalence I	ndex is $\leq 3.0^1$		
erb Stratum (Plot size: <u>5 ft</u> )	_			4 - Morphologie	cal Adaptations <sup>1</sup>	(Provide	supportin
. Onoclea sensibilis	5	Yes	FACW	- data in Remarks or c			
		·		Problematic Hy	drophytic Vege	ation <sup>1</sup> (E	xplain)
		<u> </u>		<sup>1</sup> Indicators of hydric	soil and wetland	d hydrolo	ogy must b
				present, unless distu	irbed or probler	natic	
				Definitions of Vegeta	ition Strata:		
				Tree – Woody plants			diameter a
				breast height (DBH),	-	-	
				Sapling/shrub - Woo			DBH and
				greater than or equa			
0				Herb – All herbaceou			egardless o
1				size, and woody plar			
2				Woody vines – All wo	ody vines great	er than :	3.28 ft in
	5	= Total Cov	er	height.			
<u>/oody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegeta	tion Present? Y	es 🟒	No
		·		-			
		<u> </u>		-			
				-			
l				-			
	0	= Total Cov	er				

SOIL

Depth (inches)	Matrix		Redox			ndicator or confirm	The absence of	· · · · · · · · ·
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup> Tex	ture	Remarks
0 - 12	10YR 2/1	97	10YR 6/6	3	C		Loam	
0-12	1011(2/1		10110/0				Loan	
						·		
						·		
<u> </u>								
vne: ( = (	Concentration D = I	 Denleti	on RM = Reducer	l Mat	ix MS =	Masked Sand Grains	<sup>2</sup> l ocation: P	L = Pore Lining, M = Matrix.
	Indicators:	Depieti	on, nur neddeet	iviac	17, 1913			rs for Problematic Hydric Soils <sup>3</sup> :
Histoso			Polyvalue Re	0.00	urface (S	8) (LRR R, MLRA 149		•
_	pipedon (A2)					R, MLRA 149B)	2 Cm	Muck (A10) (LRR K, L, MLRA 149B)
	istic (A3)		Loamy Muck					t Prairie Redox (A16) <b>(LRR K, L, R)</b>
_	en Sulfide (A4)		Loamy Gleye	-				Mucky Peat or Peat (S3) (LRR K, L, R)
	ed Layers (A5)		Depleted Ma					Surface (S7) <b>(LRR K, L)</b>
	ed Below Dark Surfa	ace (A1						value Below Surface (S8) (LRR K, L)
_ Thick D;	ark Surface (A12)		Depleted Da	rk Su	face (F7)			Dark Surface (S9) (LRR K, L)
_ Sandy N	Mucky Mineral (S1)		Redox Depre					Manganese Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)		·					mont Floodplain Soils (F19) <b>(MLRA 149B)</b>
	Redox (S5)							c Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
	d Matrix (S6)							Parent Material (F21)
	urface (S7) (LRR R, N	AI RA 14	19B)					Shallow Dark Surface (TF12)
							Othe	er (Explain in Remarks)
	of hydrophytic yog	etation	and wetland hyd	rolog	y must be	e present, unless dis	urbed or prob	ematic.
	· · · · ·							
	Layer (if observed):					Hydric Soil Present	2	Yes 🟒 No
	· · · · ·		None	-				
	Layer (if observed):		None	-				
estrictive	Layer (if observed): Type:		None					
estrictive   emarks:	Layer (if observed): Type: Depth (inches):							
estrictive   emarks:	Layer (if observed): Type:							
estrictive l emarks:	Layer (if observed): Type: Depth (inches):			-				
estrictive   emarks:	Layer (if observed): Type: Depth (inches):			- 				
strictive   marks:	Layer (if observed): Type: Depth (inches):							
strictive   marks:	Layer (if observed): Type: Depth (inches):			-				
strictive   marks:	Layer (if observed): Type: Depth (inches):							
strictive   marks:	Layer (if observed): Type: Depth (inches):							
strictive   marks:	Layer (if observed): Type: Depth (inches):							
estrictive   emarks:	Layer (if observed): Type: Depth (inches):			-				
estrictive   emarks:	Layer (if observed): Type: Depth (inches):			<u></u>				
estrictive   emarks:	Layer (if observed): Type: Depth (inches):			- 				
estrictive l emarks:	Layer (if observed): Type: Depth (inches):			-				
estrictive   emarks:	Layer (if observed): Type: Depth (inches):			-				
estrictive l emarks:	Layer (if observed): Type: Depth (inches):							
estrictive   emarks:	Layer (if observed): Type: Depth (inches):							
estrictive   emarks:	Layer (if observed): Type: Depth (inches):			_				
estrictive l emarks:	Layer (if observed): Type: Depth (inches):			_				
strictive   marks:	Layer (if observed): Type: Depth (inches):			_				

Hydrology Photos



Vegetation Photos

US Army Corps of Engineers

Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek	Solar Project		city/County: Spral	ers, Mont <u></u>	gomery County		Sampling Date:	2022-July-19
Applicant/Owner: Sur	neast				State: NY		Sampling Point: \	N-MLM-09_UPL-1
Investigator(s): Melan	nie Musarra			Sect	ion, Township, Ra	nge:		
Landform (hillslope, terr	race, etc.):	Flat		Local relief	(concave, convex,	, none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLRA	A): MLR/	A 144A of LRR R		Lat:	42.8402603094	Long:	-74.4634617905	Datum: WGS84
Soil Map Unit Name:	ApB - Applet	on silt loam, 3 to	8 percent slopes				NWI classific	ation:
Are climatic/hydrologic	conditions or	the site typical f	or this time of yea	ır?	Yes 🟒 No 🔄	(If no	o, explain in Rema	rks.)
0		, 0,	_ significantly dist _ naturally proble				tances" present? y answers in Rema	Yes 🟒 No arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

#### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	ne is required; check all t	that apply)	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Im</li> <li>Sparsely Vegetated Concave Survey</li> </ul>	Aquati Marl D Hydroj Oxidizi Preser Recent Thin M agery (B7) Other	Stained Leaves (B9) c Fauna (B13) reposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No _ <b>∠</b> Yes No _ <b>∠</b> Yes No _ <b>∠</b>	Depth (inches): Depth (inches): Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)			-
Describe Recorded Data (stream g	auge, monitoring well, a	erial photos, previous inspections), if	available:
The criterion for wetland hydrolog	y is not met.		

VEGETATION -- Use scientific names of plants.

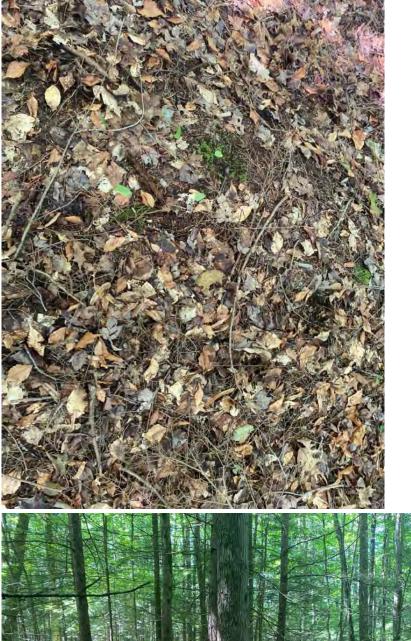
Sampling Point: W-MLM-09\_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?		Dominance Test wor Number of Dominan			
4 <b>T</b>		· · · · · · · · · · · · · · · · · · ·	Status	Are OBL, FACW, or FA	•	0	(A)
1. Tsuga canadensis	90	Yes	FACU	Total Number of Dor			
2. Fagus grandifolia	10	No	FACU	Across All Strata:	in an openeo	2	(B)
3		<u> </u>		Percent of Dominant	Species That		
4		<u> </u>		Are OBL, FACW, or FA		0	(A/B)
5				Prevalence Index wo	rksheet:		
5		·		Total % Cov	<u>er of:</u>	<u>Multiply</u>	<u>/ By:</u>
7				OBL species	0	x 1 =	0
	100	= Total Cov	er	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
. Tsuga canadensis	10	Yes	FACU	FACU species	110	x 4 =	440
		·		UPL species	0	x 5 =	0
3				Column Totals	110	(A)	440 (B)
4		·		Prevalence	Index = B/A =	4	
5				Hydrophytic Vegetati	on Indicators:		
5				1- Rapid Test fo		egetatio	n
7				2 - Dominance		6861010	
	10	= Total Cov	er	3 - Prevalence I			
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphologic		Provide	supporting
I				data in Remarks or o			
2				Problematic Hy			xplain)
3				<sup>1</sup> Indicators of hydric			-
4				present, unless distu	rbed or probler	matic	
5				Definitions of Vegeta	tion Strata:		
5				Tree – Woody plants	3 in. (7.6 cm) or	r more in	diameter a
7				breast height (DBH),	regardless of h	eight.	
3				Sapling/shrub - Woo	dy plants less tl	han 3 in.	DBH and
Э				greater than or equa			
10				Herb – All herbaceou			egardless of
11				size, and woody plan			
2.				Woody vines – All wo	ody vines great	ter than i	3.28 ft in
	0	= Total Cov	er	height.			
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetat	tion Present?	/es	No 🟒
I.							
2.							
3.							
4.							
	0	= Total Cov	er				

SOIL

epth Matrix		Redox					bsence of indicators.)
ches) Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
- 3 10YR 2/2	100					Peat	
- 7 2.5Y 7/1	100		—		·	Silt	
- 12 2.5Y 6/4	100		—		·	Silt	
2.51 0/1			—			Jiit	
			_				
	·				<u> </u>		
			_				
			_				
	·			<u> </u>			
	:		_				
	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L	ocation: PL = Pore Lining, M = Matrix.
ric Soil Indicators:		Debuselus Del	C				Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Polyvalue Bel					2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
Histic Epipedon (A2)		Thin Dark Su					Coast Prairie Redox (A16) <b>(LRR K, L, R)</b>
Black Histic (A3) Hydrogen Sulfide (A4)		Loamy Mucky			(LKK K, L	.)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
		Loamy Gleye					Dark Surface (S7) (LRR K, L)
Stratified Layers (A5) Depleted Below Dark Suri		Depleted Mat					Polyvalue Below Surface (S8) (LRR K, L)
	ace (ATT)						Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surface (A12)		Depleted Dar					Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)		Redox Depre	ssior	is (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)							Red Parent Material (F21)
Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Surface (S7) <b>(LRR R,</b>	MLRA 149	9B)					Other (Explain in Remarks)
icators of hydrophytic ve	getation a	and wetland hydr	olog	y must be	e presen	t, unless disturbe	ed or problematic.
rictive Layer (if observed	):						
Туре:		None			Hydric	Soil Present?	Yes No
Depth (inches):							
oositive indication of hyd	ric soils w	as observed.					

Hydrology Photos



Vegetation Photos



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-01_PEM-1
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Range:N	A
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none):	Concave Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8676056117 Long:	-74.4788922743 Datum: WGS84
Soil Map Unit Name: Darien silt loam, 3 to 8 perc	ent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	for this time of year? Yes _∠_ No (If n	o, explain in Remarks.)
	significantly disturbed? Are "Normal Circums naturally problematic? (If needed, explain ar	tances" present? Yes 🟒 No y answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-01
Remarks: (Explain alternative procedur	es here or in a separate re	port)	
Covertype is PEM.			

### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of	one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ir</li> <li>Sparsely Vegetated Concave S</li> </ul>	Aquat Marl I Hydro Oxidiz Presei Recen Thin M magery (B7) Other	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) red Rhizospheres on Living F nce of Reduced Iron (C4) it Iron Reduction in Tilled So Auck Surface (C7) (Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		_
Water Table Present?	Yes 🟒 No	Depth (inches):	10	Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches):	6	_
(includes capillary fringe)				
Describe Recorded Data (stream	gauge, monitoring well, a	aerial photos, previous insp	ections), if	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-01\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species Tha Are OBL, FACW, or FAC:	t 2	(A)
				<ul> <li>Total Number of Dominant Specie</li> <li>Across All Strata:</li> </ul>	s 2	(B)
				<ul> <li>Percent of Dominant Species That</li> </ul>	100	(A /D)
k 5.				Are OBL, FACW, or FAC:	100	(A/B)
 				<ul> <li>Prevalence Index worksheet:</li> </ul>		
•				- <u>Total % Cover of:</u>	Multiply	
	0	= Total Cov	er	- OBL species 65	x 1 =	65
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		-	CI .	FACW species 10	x 2 =	20
				FAC species 10	x 3 =	30
				FACU species 20	x 4 =	80
				- UPL species 0	x 5 =	0
				- Column Totals 105	(A)	195 (B)
				Prevalence Index = B/A	=	
				Hydrophytic Vegetation Indicators	:	
				1- Rapid Test for Hydrophytic	vegetation	
	0	= Total Cov	er	2 - Dominance Test is >50%		
<u>lerb Stratum (</u> Plot size: <u>5 ft</u> )		_		$\checkmark$ 3 - Prevalence Index is ≤ 3.0		
. Typha angustifolia	40	Yes	OBL	4 - Morphological Adaptation		supporting
. Lythrum salicaria	25	Yes	OBL	- data in Remarks or on a separate		alaia)
B. Dipsacus laciniatus	20	No	FACU	<ul> <li>Problematic Hydrophytic Veg</li> <li><sup>1</sup>Indicators of hydric soil and wetla</li> </ul>	-	
. Phalaris arundinacea	10	No	FACW	present, unless disturbed or prob	, ,	gy must be
5. Euthamia graminifolia	10	No	FAC	Definitions of Vegetation Strata:		
j.				Tree – Woody plants 3 in. (7.6 cm)	or more in o	diameter a
7.				breast height (DBH), regardless of	height.	
3.				Sapling/shrub – Woody plants less	s than 3 in. D	OBH and
).				greater than or equal to 3.28 ft (1	m) tall.	
0.				Herb – All herbaceous (non-wood		gardless of
1				size, and woody plants less than 3	.28 ft tall.	
2.				Woody vines – All woody vines gre	eater than 3.	28 ft in
	105	= Total Cov	er	height.		
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 N	lo
				_		
2				_		
3				_		
1				_		
	0	= Total Cov	er			

SOIL

tration, D = De ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) dineral (S1) Matrix (S4) S5) x (S6) S7) (LRR R, MLF	95 	Color (moist) 10YR 5/8 10YR 5/8 RM = Reduced Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark S Depleted Dai Redox Depre Redox Depre )	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Remarks         Remarks <tr tr=""> <t< th=""></t<></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  e (A11)  RA 149B)</td><td>_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre</td><td>low S rface y Min d Mat trix (F Surfac rk Sur</td><td>urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>58) (LRR R, M R R, MLRA 14 (LRR K, L)</td><td>IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -</td><td>Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)</td></tr> <tr><td>8) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b></td><td>  ≙ (A11)  RA 149B)</td><td>_ Thin Dark Su _ Loamy Muck _ Loamy Gleye &lt; Depleted Ma _ Redox Dark S _ Depleted Dar _ Redox Depre</td><td>rface y Min d Mat itrix (F Surfac rk Sur</td><td>(S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7</td><td>R R, MLRA 14 (LRR K, L)</td><td>98)</td><td><ul> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B)</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> </ul></td></tr> <tr><td>57) <b>(LRR R, MLF</b></td><td></td><td>)</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>ophytic vegeta</td><td></td><td></td><td></td><td></td><td></td><td></td><td> Other (Explain in Remarks)</td></tr> <tr><td></td><td>ation and</td><td>d wetland hydi</td><td>rology</td><td>' must b</td><td>e present, u</td><td></td><td>or problematic.</td></tr> <tr><td>f observed):</td><td></td><td>Nono</td><td></td><td></td><td>Hudric Soil</td><td>Drocont?</td><td>Yor ( No</td></tr> <tr><td>(inches).</td><td></td><td>None</td><td>•</td><td></td><td></td><td>Present?</td><td>Yes 🟒 No</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>observed): (inches):</td><td></td><td>None</td><td>None</td><td>None</td><td>None Hydric Soil</td><td>None Hydric Soil Present?</td></tr>	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)	8) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  ≙ (A11)  RA 149B)	_ Thin Dark Su _ Loamy Muck _ Loamy Gleye < Depleted Ma _ Redox Dark S _ Depleted Dar _ Redox Depre	rface y Min d Mat itrix (F Surfac rk Sur	(S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	R R, MLRA 14 (LRR K, L)	98)	<ul> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B)</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> </ul>	57) <b>(LRR R, MLF</b>		)						ophytic vegeta							Other (Explain in Remarks)		ation and	d wetland hydi	rology	' must b	e present, u		or problematic.	f observed):		Nono			Hudric Soil	Drocont?	Yor ( No	(inches).		None	•			Present?	Yes 🟒 No										observed): (inches):		None	None	None	None Hydric Soil	None Hydric Soil Present?
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
ors: n (A2) 3) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  e (A11)  RA 149B)	_ Polyvalue Be _ Thin Dark Su _ Loamy Muck _ Loamy Gleye ⁄ Depleted Ma _ Redox Dark S _ Depleted Dai _ Redox Depre	low S rface y Min d Mat trix (F Surfac rk Sur	urface (S (S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	58) (LRR R, M R R, MLRA 14 (LRR K, L)	IRA 149B) 9B) - - - - - - - - - - - - - - - - - - -	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)																																																																																																																																
8) ide (A4) rs (A5) w Dark Surface face (A12) Mineral (S1) Matrix (S4) S5) x (S6) S7) <b>(LRR R, MLF</b>	  ≙ (A11)  RA 149B)	_ Thin Dark Su _ Loamy Muck _ Loamy Gleye < Depleted Ma _ Redox Dark S _ Depleted Dar _ Redox Depre	rface y Min d Mat itrix (F Surfac rk Sur	(S9) <b>(LRF</b> eral (F1) rix (F2) 3) e (F6) face (F7	R R, MLRA 14 (LRR K, L)	98)	<ul> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B)</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> </ul>																																																																																																																																
57) <b>(LRR R, MLF</b>		)																																																																																																																																					
ophytic vegeta							Other (Explain in Remarks)																																																																																																																																
	ation and	d wetland hydi	rology	' must b	e present, u		or problematic.																																																																																																																																
f observed):		Nono			Hudric Soil	Drocont?	Yor ( No																																																																																																																																
(inches).		None	•			Present?	Yes 🟒 No																																																																																																																																
	observed): (inches):		None	None	None	None Hydric Soil	None Hydric Soil Present?																																																																																																																																

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25	
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-01_UPL-1	
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Range:	NA	
Landform (hillslope, terrace, etc.): Low Hill	Local relief (concave, convex, nor	e): Convex Slope (%): 1	to 3
Subregion (LRR or MLRA): LRR L	Lat: 42.8672265402 Lo	ng: -74.4787786995 Datum: WGS	584
Soil Map Unit Name: Darien silt loam, 3 to 8 pe	rcent slopes	NWI classification:	
Are climatic/hydrologic conditions on the site typi	cal for this time of year? Yes _∠_ No (I	f no, explain in Remarks.)	
		mstances" present? Yes 🖌 No any answers in Remarks.)	

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report	)	
Covertype is UPL.			

#### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	<u>e is required; check all t</u>	hat apply)	Secondary Indicators (minimum of	<u>two required)</u>
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Su</li> </ul>	Aquatio Marl Do Hydrog Oxidize Presen Recent Thin M agery (B7) Other (	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Image</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>	gery (C9)
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):	_	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes No 🟒
Saturation Present?	Yes No 🟒	Depth (inches):		
(includes capillary fringe)				
	auge, monitoring well, a	erial photos, previous inspections), if	available:	
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-01\_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species Th Are OBL, FACW, or FAC:	at 0	(A)
·		·		Total Number of Dominant Spec	es 2	(B)
				Across All Strata:		
				<ul> <li>Percent of Dominant Species The</li> <li>Are OBL, FACW, or FAC:</li> </ul>	<sup>at</sup> O	(A/B)
·				Prevalence Index worksheet:		
				- <u>Total % Cover of:</u>	Multiply	By:
				- OBL species 0	x 1 =	<u> </u>
	0	= Total Cov	er	FACW species 0	x2=	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x3=	0
				· · ·		
				- FACU species 35	x 4 =	140
				- UPL species 60	x 5 =	300
		•		- Column Totals95	(A)	440 (B)
		· ·		Prevalence Index = B/A		
		·		- Hydrophytic Vegetation Indicato		
				1- Rapid Test for Hydrophy	-	า
	0	= Total Cov	er	2 - Dominance Test is > 509		
lerb Stratum (Plot size: <u>5 ft</u> )		_		$3$ - Prevalence Index is $\leq 3$ .		
. Medicago sativa	60	Yes	UPL	4 - Morphological Adaptatio		supportin
. Phleum pratense	25	Yes	FACU	- data in Remarks or on a separat		
. Poa pratensis	10	No	FACU	Problematic Hydrophytic V	0	
l.				<ul> <li>Indicators of hydric soil and weight of hydroxic solutions of hydroxic solutions and hydroxic solut</li></ul>	-	ogy must be
				<u>}</u>	Ulematic	
·				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm	)	
··				breast height (DBH), regardless	-	ulameter a
·		'		Sapling/shrub – Woody plants le	-	DBH and
				greater than or equal to 3.28 ft (		DDITAIL
				Herb – All herbaceous (non-woo		gardless o
0		<u> </u>		size, and woody plants less than		.gai aless o
1		<u> </u>		Woody vines – All woody vines g		8.28 ft in
2				height.		
	95	= Total Cov	er	Hydrophytic Vegetation Present		
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )				hydrophyde vegetation i resent	: 103 1	NO <u>v</u>
				-		
				-		
B				-		
l				_		
	0	= Total Cov	er			

SOIL

	ription: (Describe	to the de	-			indicato	r or confirm the a	bsence of indica	tors.)
Depth	Matrix		Redox						- ·
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 6	10YR 3/3	100					Silt Loam		
6 - 18	10YR 3/4	100		_			Silt Loam	·	
				-					
		<u> </u>							
<sup>1</sup> Type: C = C	oncentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L	ocation: PL = Poi	re Lining, M = Matrix.
Hydric Soil I		1							Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be	ow S	urface (S	8) (LRR	R, MLRA 149B)		,
	pipedon (A2)		Thin Dark Su						(A10) (LRR K, L, MLRA 149B)
Black Hi			Loamy Muck						ie Redox (A16) <b>(LRR K, L, R)</b> y Peat or Peat (S3) <b>(LRR K, L, R)</b>
Hydroge	en Sulfide (A4)		Loamy Gleye						ce (S7) <b>(LRR K, L)</b>
Stratifie	d Layers (A5)		Depleted Ma	trix (l	F3)				Below Surface (S8) <b>(LRR K, L)</b>
Deplete	d Below Dark Surfa	ace (A11)	) Redox Dark S	urfa	ce (F6)			-	Surface (S9) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Dar	k Su	rface (F7)	)			anese Masses (F12) <b>(LRR K, L, R)</b>
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ns (F8)			-	Floodplain Soils (F19) <b>(MLRA 149B)</b>
Sandy G	leyed Matrix (S4)								dic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)								t Material (F21)
Stripped	l Matrix (S6)								w Dark Surface (TF12)
Dark Su	rface (S7) <b>(LRR R, N</b>	/LRA 149	9B)					-	lain in Remarks)
<sup>3</sup> Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must b	e preser	it, unless disturbe	-	
Restrictive L	ayer (if observed):	:							
	Type:		None			Hydric	Soil Present?	Yes	No
	Depth (inches):							_	
Remarks:									
Kernarks.									

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-02_PEM-1
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Range:	NA
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none)	: Concave Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8701628885 Long	: -74.4781095722 Datum: WGS84
Soil Map Unit Name: Darien silt loam, 3 to 8 perce	ent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	for this time of year? Yes 🖌 No (If r	no, explain in Remarks.)
	significantly disturbed? Are "Normal Circum naturally problematic? (If needed, explain a	stances" present? Yes 🖌 No ny answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-02
Remarks: (Explain alternative procedur	res here or in a separate rep	ort)	
Covertype is PEM.			

#### HYDROLOGY

Wetland Hydrology Indicators:         Primary Indicators (minimum of or         ✓         Surface Water (A1)         ✓         High Water Table (A2)         ✓         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Image         Sparsely Vegetated Concave Supersely	Water-S Aquatic Marl De Hydrog Oxidize Presenc Recent Thin Mu agery (B7)Other (E	Roots (C3) bils (C6)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream g	Yes _∠_ No Yes _∠_ No Yes _∠_ No auge, monitoring well, ae	Depth (inches): Depth (inches): Depth (inches): rrial photos, previous inspe	2 6 0 ections), if	Wetland Hydrology Present? Yes No available:
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-02\_PEM-1

<u>%</u> Cover	Species?	Status	- Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species	2	(A)
	·				
				2	(B)
			Across All Strata:		(3)
			Percent of Dominant Species That	100	(A/B)
				Multiply F	Sv:
					90
0	= Total Cov	er	· · · · · · · · · · · · · · · · · · ·		20
			· · · · · · · · · · · · · · · · · · ·		0
			· · ·		0
			· · · · · · · · · · · · · · · · · · ·		0
			· · · · · · · · · · · · · · · · · · ·		
					110 (B)
				Vegetation	
0	= Total Cov	er			
				1 (Provide s	upporting
60	Yes	OBL			apporting
20	Yes	OBL		-	olain)
10	No	OBL			
10	No	FACW	5	, 0	, ,
			Definitions of Vegetation Strata:		
			Tree – Woody plants 3 in. (7.6 cm) o	r more in d	iameter a
			breast height (DBH), regardless of h	neight.	
			Sapling/shrub – Woody plants less	han 3 in. D	BH and
					ardless of
				ter than 3.2	28 ft in
100	= Total Cov	er	height.		
	-		Hydrophytic Vegetation Present?	Yes 🟒 No	о с
			-		
			-		
			-		
0	= Total Cov	er	-		
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 = Total Cov	0         = Total Cover           0         = Total Cover           0         = Total Cover           0         = Total Cover           60         Yes         OBL           20         Yes         OBL           10         No         FACW           0         =         —	Image: Solution of the construction of the constructio	Are OBL, FACW, or FAC:Prevalence Index worksheet:Image: Delta constraint of the system of

SOIL

Depth	Matrix		Redox					bsence of indicators.)
inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 4	10YR 3/2	100		·			Clay Loar	
4 - 20	10YR 3/2	95	2.5YR 4/6	5	С	М	Clay Loar	
				·			<b>y</b>	
				·				
				· —		<u> </u>		
		·		· —				
		·		· —		<u> </u>		
		. <u> </u>						
				· . <del></del>				
	Concentration, D =	Depletic	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> L	ocation: PL = Pore Lining, M = Matrix.
Histosol	ndicators:		Polyvalue Be	0.000	urface (S	8) <b>(I RR F</b>	MI RA 149B)	Indicators for Problematic Hydric Soils <sup>3</sup> :
-	oipedon (A2)		Thin Dark Su					2 cm Muck (A10) (LRR K, L, MLRA 149B)
_ Black Hi			Loamy Muck					Coast Prairie Redox (A16) (LRR K, L, R)
-	en Sulfide (A4)		Loamy Gleye	·			,	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Ma					Dark Surface (S7) <b>(LRR K, L)</b>
	d Below Dark Surfa	ace (A11						Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted Dar		• •			Thin Dark Surface (S9) (LRR K, L)
	lucky Mineral (S1)		Redox Depre					Iron-Manganese Masses (F12) <b>(LRR K, L, R)</b>
				33101	13 (10)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	ileyed Matrix (S4)							Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	edox (S5)							Red Parent Material (F21)
	d Matrix (S6)							Very Shallow Dark Surface (TF12)
_ Dark Su	rface (S7) <b>(LRR R, N</b>	ILRA 14	9B)					Other (Explain in Remarks)
dicators	of hydrophytic veg	etation	and wetland hydr	olog	y must b	e presen	t, unless disturbe	ed or problematic.
strictive l	ayer (if observed):							
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
marks:								

Hydrology Photos



Soil Photos



Photo of Sample Plot South

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-	Aug-25
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD	-02_UPL-1
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Ra	nge:_NA	
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex,	none): Undulating	Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8701600386	Long: -74.4780579396	Datum: WGS84
Soil Map Unit Name: Darien silt loam, 3 to 8 percent	ent slopes	NWI classification:	
Are climatic/hydrologic conditions on the site typica	Il for this time of year? Yes _∠_ No	(If no, explain in Remarks.)	
		ircumstances" present? Ye blain any answers in Remarks.)	s 🟒 No

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL.			

### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	<u>e is required; check all t</u>	Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Surface</li> </ul>		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):	_	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?   Yes No	
Saturation Present?	Yes No 🟒	Depth (inches):		
(includes capillary fringe)				
	auge, monitoring well, a	erial photos, previous inspections), if	available:	
Remarks:				

Sampling Point: W-NSD-02\_UPL-1

<u> Free Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	<sup>at</sup> 0	(A)
		·		Total Number of Dominant Specie Across All Strata:	<sup>25</sup> 2	(B)
·				Percent of Dominant Species Tha	t	
				Are OBL, FACW, or FAC:	0	(A/B)
				Prevalence Index worksheet:		
·		<u> </u>		- <u>Total % Cover of:</u>	<u>Multiply</u>	By:
·	0	= Total Cov	or	- OBL species 0	x 1 =	0
anling/Chrub Stratum (Diat size) 15 ft )	0	_ 10tai COV	EI	FACW species 0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x 3 =	0
·				- FACU species 20	x 4 =	80
		·		- UPL species 75	x 5 =	375
				- Column Totals 95	(A)	455 (B)
		·		Prevalence Index = B/A		
		·		Hydrophytic Vegetation Indicators	5:	
				1- Rapid Test for Hydrophyti	c Vegetatior	ו
	0	= Total Cov	or	2 - Dominance Test is > 50%		
lauk Strature (Diataina) - 5 ft )	0	_ 10tal Cov	er	3 - Prevalence Index is $\leq$ 3.0	1	
erb Stratum (Plot size: <u>5 ft</u> )	75	Vee		4 - Morphological Adaptation	ns¹ (Provide	supporting
. Medicago sativa	75	Yes	UPL	- data in Remarks or on a separate	sheet)	
. Phleum pratense	20	Yes	FACU	<ul> <li>Problematic Hydrophytic Ve</li> </ul>		
·		·		Indicators of hydric soil and wetle	and hydrolo	gy must be
				_ present, unless disturbed or prob	lematic	
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm)	or more in	diameter a
				breast height (DBH), regardless o	f height.	
B				Sapling/shrub – Woody plants les	s than 3 in. I	DBH and
				greater than or equal to 3.28 ft (1	m) tall.	
0				Herb – All herbaceous (non-wood		gardless o
1				size, and woody plants less than 3		
2				Woody vines – All woody vines gr	eater than 3	.28 ft in
	95	= Total Cov	er	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetation Present?	Yes N	No 🔽
· · · · · · · · · · · · · · · · · · ·						
				-		
		·		-		
		· ·		-		
··	0	= Total Cov	er	-		
		-				

SOIL

0 - 20       10YR 3/2       100	0 - 20       10YR 3/2       100       Silt Loam         0 - 20       10YR 3/2       100       Silt Loam         Silt Loam       Silt Loam       Silt Loam         Silt Soil I
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix.         ydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>9</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR K, MLRA 149B)         Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)	ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix         ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix         ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix         ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix         ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix         ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix         Histosol (A1)
dic Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Weis Spodic (TA6) (MLRA 144A, 145, 149)         Matrix (S6)       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)	dric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Stripped Matrix (S6)         Dark Surface (S7) (LRR R, MLRA 149B)       West Surface (TF1)         Other (Explain in Remarks)       Other (Explain in Remarks)         dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Stripped Matrix (S6)         Dark Surface (S7) (LRR R, MLRA 149B)       Weise Spodic (TA6) (MLRA 144A, 145, 149)         Mesic Spodic (TA6) (MLRA 144B)       Weise Spodic (TA6) (MLRA 144A, 145, 149)         Mesic Spodic (TA6) (LRR R, MLRA 149B)       Weise Spodic (TA6) (MLRA 144A, 145, 149)         Sandy Redox (S5)       Red Parent Material (F21)         Other (Explain in Remarks)       Other (Explain in Remarks)         dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	dric Soil Indicators:       Indicators:         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Redox (S5)
Tric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)	dric Soil Indicators:       Indicators:         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F7)      Iron-Manganese Masses (F12) (         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Redox (S5)
Iric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Redox (S5)      Nedox Depressions (F8)         Stripped Matrix (S6)      Nedox Dark Surface (T12)         Dark Surface (S7) (LRR R, MLRA 149B)      Nedox Dark Surface (T12)         Dark Surface (S7) (LRR R, MLRA 149B)	Iric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A         Sandy Redox (S5)       Wery Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         Iticators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other resplain in Remarks)
Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F1)       Thin Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Peidemont Floodplain Soils (F19) (MLRA 1445, 149         Stripped Matrix (S6)       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)         Icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F7)       Thin Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Depleted Matrix (S6)         Dark Surface (S7) (LRR R, MLRA 149B)       Mesic Spodic (TA6) (MLRA 144A         Mesic Spodic (TA6) (MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         Iticators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other resplain in Remarks)
Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F1)       Thin Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Peidemont Floodplain Soils (F19) (MLRA 1445, 149         Stripped Matrix (S6)       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)         Icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F7)       Thin Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Depleted Matrix (S6)         Dark Surface (S7) (LRR R, MLRA 149B)       Mesic Spodic (TA6) (MLRA 144A         Mesic Spodic (TA6) (MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         Iticators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other resplain in Remarks)
ric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)         Icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	ric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F7)       Thin Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A         Stripped Matrix (S6)       Wery Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)
ric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Fhick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F12)         Oark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Oark Surface (S7)       Other (Explain in Remarks)         icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)	ric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Fhick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         Stratificators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other results of the problematic.
ric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F12)         Oark Surface (S7) (LRR R, MLRA 149B)       Wesic Spodic (TA6) (MLRA 144A, 145, 149)         Stardy Redox (S5)       Red Parent Material (F21)         Oark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)         icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)	ric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Oark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Oark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         Stratificators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)
ric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Fhick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F12)         Oark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Oark Surface (S7)       Other (Explain in Remarks)         icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)	ric Soil Indicators:       Indicators:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Fhick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         Stratificators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other results of the problematic.
icic Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         distosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         distic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         'hick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F21)         Oark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)	ric Soil Indicators:       Indicators:         distosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         distic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Extratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         'hick Dark Surface (A12)      Depleted Dark Surface (F7)         Gandy Gleyed Matrix (S4)      Redox Depressions (F8)         Sandy Redox (S5)      Red Parent Material (F21)         Oark Surface (S7) (LRR R, MLRA 149B)
icic Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         distosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         distic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         'hick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F21)         Oark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)	ric Soil Indicators:       Indicators:         distosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         distic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Extratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         'hick Dark Surface (A12)      Depleted Dark Surface (F7)         Gandy Gleyed Matrix (S4)      Redox Depressions (F8)         Sandy Redox (S5)      Red Parent Material (F21)         Oark Surface (S7) (LRR R, MLRA 149B)
Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L, R)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Depleted Matrix (F3)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Hick Dark Surface (A12)       Depleted Dark Surface (F7)       Iron-Manganese Masses (F12) (LRR K, L, F12)         Gandy Gleyed Matrix (S4)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 149         Sandy Redox (S5)       Red Parent Material (F21)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)         Icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)	Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)       2 cm Muck (A10) (LRR K, L MLR         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (L         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (F7)         Hick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Gandy Gleyed Matrix (S4)       Redox Depressions (F8)       Mesic Spodic (TA6) (MLRA 144A         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144B)       Red Parent Material (F21)         Other (Explain in Remarks)       Other (Explain in Remarks)       Other (Explain in Remarks)         Icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other resplain in Remarks)
distic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L)         Sandy Gleyed Matrix (S4)       Depleted Dark Surface (F7)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Red Parent Material (F21)         Oark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF12)         Oark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)	Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)         Stratified Layers (A5)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thin Dark Surface (F2)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A         Stripped Matrix (S6)       West Surface (S7) (LRR R, MLRA 149B)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L, R)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Thin Dark Surface (S9) (LRR K, L, F8)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 149)         Sandy Redox (S5)       Red Parent Material (F21)       Very Shallow Dark Surface (TF12)         Dark Surface (S7) (LRR R, MLRA 149B)       Coast Prairie Redox Ceptent in Remarks)       Coast Prairie Redox (A16) (MLRA 144A, 145, 149)         Stripped Matrix (S6)       Coast Prairie Redox Ceptent in Remarks)       Coast Prairie Redox (A16) (MLRA 144A, 145, 149)         Dark Surface (S7) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (MLRA 144B, 145, 149)       Coast Prairie Redox (A16) (MLRA 144A, 145, 149)         Stripped Matrix (S6)       Coast Prairie Redox Surface (TF12)       Other (Explain in Remarks)         Coast Prairi R day Parent Material (F21)       Cother (Explain in Re	Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR I         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (L         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)       Depleted Matrix (F3)       Polyvalue Below Surface (S8) (L         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thin Dark Surface (S9) (LRR K, L         Fink Dark Surface (A12)       Depleted Dark Surface (F7)       Iron-Manganese Masses (F12) (         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       Piedmont Floodplain Soils (F19)         Sandy Redox (S5)       Mesic Spodic (TA6) (MLRA 144A       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1)       Very Shallow Dark Surface (TF1)         Dark Surface (S7) (LRR R, MLRA 149B)       Coast Prairie Redox Corpo       Iron-Manganese Masses (F12) (         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)       Iron-Manganese Masses (F12) (         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)       Iron-Manganese Masses (F12) (         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)       Iron-Manganese Masses (F12) (         Dark Surface (S7) (LRR R, MLRA 149B)
Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)      5 cm Mucky Peat or Peat (S3) (LRR K, L, R)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)      Redox Dark Surface (F6)      Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)      Iron-Manganese Masses (F12) (LRR K, L, F         Sandy Mucky Mineral (S1)      Redox Depressions (F8)      Piedmont Floodplain Soils (F19) (MLRA 144         Sandy Redox (S5)      Redox Depressions (F8)      Red Parent Material (F21)         Stripped Matrix (S6)      Red Parent Material (F21)      Very Shallow Dark Surface (TF12)         Dark Surface (S7) (LRR R, MLRA 149B)	Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)      5 cm Mucky Peat or Peat (S3) (L         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Dark Surface (S7) (LRR K, L)         Depleted Below Dark Surface (A11)      Redox Dark Surface (F6)      Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)      Iron-Manganese Masses (F12) (         Sandy Mucky Mineral (S1)      Redox Depressions (F8)      Mesic Spodic (TA6) (MLRA 144A         Sandy Redox (S5)      Mesic Spodic (TA6) (MLRA 144A      Red Parent Material (F21)         Stripped Matrix (S6)      Very Shallow Dark Surface (TF1)      Nother (Explain in Remarks)         Iicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11) Redox Dark Surface (F6)      Thin Dark Surface (S9) (LRR K, L)         Think Dark Surface (A12)      Depleted Dark Surface (F7)      Iron-Manganese Masses (F12) (LRR K, L, F         Sandy Mucky Mineral (S1)      Redox Depressions (F8)      Piedmont Floodplain Soils (F19) (MLRA 14         Sandy Redox (S5)      Red Parent Material (F21)      Nersion CT60)         Stripped Matrix (S6)      Red Parent Material (F21)      Nother (Explain in Remarks)         Dark Surface (S7) (LRR R, MLRA 149B)	Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Depleted Selow Dark Surface (A11)Redox Dark Surface (F6)
Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)	Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       — Folyvalue Below Surface (S8) (L         Thick Dark Surface (A12)       _ Depleted Dark Surface (F7)       — Thin Dark Surface (S9) (LRR K, L         Sandy Mucky Mineral (S1)       _ Redox Depressions (F8)       — Piedmont Floodplain Soils (F19)         Sandy Gleyed Matrix (S4)       _ Mesic Spodic (TA6) (MLRA 144A         Sandy Redox (S5)       _ Red Parent Material (F21)         Stripped Matrix (S6)       _ Very Shallow Dark Surface (TF1         Dark Surface (S7) (LRR R, MLRA 149B)       _ Other (Explain in Remarks)         dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Trictive Layer (if observed):
Thick Dark Surface (A12)	Thick Dark Surface (A12)
Sandy Mucky Mineral (S1)	Sandy Mucky Mineral (S1)
Sandy Gleyed Matrix (S4)	Sandy Gleyed Matrix (S4)
Sandy Redox (S5)      Mesic Spodic (1Ab) (MLRA 144A, 145, 149         Stripped Matrix (S6)      Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)      Very Shallow Dark Surface (TF12)         Licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.      Other (Explain in Remarks)         trictive Layer (if observed):	Sandy Redox (S5)       Mesic Spotic (TA6) (MLRA 144A         Stripped Matrix (S6)       Red Parent Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1         Licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         trictive Layer (if observed):
Stripped Matrix (S6)	Stripped Matrix (S6)       Red Parent Material (P21)         Dark Surface (S7) (LRR R, MLRA 149B)       Very Shallow Dark Surface (TF1         licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Other (Explain in Remarks)         trictive Layer (if observed):       Other section and wetland hydrology must be present, unless disturbed or problematic.
Dark Surface (S7) (LRR R, MLRA 149B)	Dark Surface (S7) (LRR R, MLRA 149B)
dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed):	dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed):
strictive Layer (if observed):	strictive Layer (if observed):
Type: None Hydric Soil Present? Yes No _∠	Turney None Undrig Sail Procent? Voc No. (
	Type. None Hydric soil Present? Tes NO
Depth (inches):	Depth (inches):

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-03_PEM-1
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Range:	NA
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none	): Concave Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8719755588 Lon	g: -74.4776104298 Datum: WGS84
Soil Map Unit Name: Lansing silt loam, 15 to 25 p	ercent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	for this time of year? Yes 🟒 No (If	no, explain in Remarks.)
	significantly disturbed? Are "Normal Circun naturally problematic? (If needed, explain	nstances" present? Yes _✔_ No any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-03
Remarks: (Explain alternative procedures h	ere or in a separate report	;)	
Covertype is PEM.			

### HYDROLOGY

Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required) 
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream)	Yes No Yes No Yes No gauge, monitoring well, a	Depth (inches): Depth (inches): Depth (inches): aerial photos, previous insp	5 0 ections), if	Wetland Hydrology Present? Yes _∠_ No available:
Remarks:				

Sampling Point: W-NSD-03\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
·		······		Total Number of Dominant Species		(D)
				Across All Strata:	2	(B)
				Percent of Dominant Species That	100	(A/B)
				Are OBL, FACW, or FAC:		
 				Prevalence Index worksheet:		
•				- <u>Total % Cover of:</u>	Multiply B	-
	0	= Total Cov	er	- OBL species 40	x 1 =	40
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FACW species 40	x 2 =	80
				FAC species 0	x 3 =	0
				FACU species 0	x 4 =	0
				- UPL species 0	x 5 =	0
				- Column Totals 80	(A)	120 (B)
				Prevalence Index = B/A =	1.5	
				- Hydrophytic Vegetation Indicators:		
·				1- Rapid Test for Hydrophytic	Vegetation	
·	0	= Total Cov	er	2 - Dominance Test is >50%		
lerb Stratum (Plot size: <u>5 ft</u> )		-		$\checkmark$ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>		
. Impatiens capensis	35	Yes	FACW	4 - Morphological Adaptations		upporting
2. Epilobium palustre	25	Yes	OBL	- data in Remarks or on a separate s		
3. Typha angustifolia	15	No	OBL	Problematic Hydrophytic Vege		
. Eupatorium perfoliatum	5	No	FACW	<ul> <li>Indicators of hydric soil and wetlar</li> </ul>	, 0.	/ must be
			T/ICW	_ present, unless disturbed or proble	matic	
				Definitions of Vegetation Strata:		
 7				Tree – Woody plants 3 in. (7.6 cm) o breast height (DBH), regardless of h		ametera
3.				Sapling/shrub – Woody plants less		hac HS
).				greater than or equal to 3.28 ft (1 m		
0.				Herb – All herbaceous (non-woody)		ardless of
				size, and woody plants less than 3.2		
1				- Woody vines – All woody vines grea		8 ft in
2		Tabal Ca		height.		
	80	= Total Cov	er	Hydrophytic Vegetation Present?	Yes 🖌 No	)
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )						
		<u> </u>		-		
				-		
3				-		
ł				-		
	0	= Total Cov	er			

### SOIL

nches) C	Matrix		Redo	<pre>&lt; Feat</pre>	ures		bsence of indicators.)
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup> Text	ure Remarks
) - 20	10YR 3/2	90	7.5YR 4/6	10	С	M Silty Cla	y Loam
		_		_			
		_					
		_					
		_					
		_					
		Pepleti	on, RM = Reduce	d Mati	rix, MS =	Masked Sand Grains. <sup>2</sup> L	ocation: PL = Pore Lining, M = Matrix.
l <b>ric Soil Indic</b> Histosol (A1)			Dobastar D		urface (C	8) (LRR R, MLRA 149B)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epiped Black Histic ( Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Muck Sandy Gleye Sandy Redo: Stripped Ma	don (A2) (A3) Jlfide (A4) yers (A5) Jow Dark Surface Gurface (A12) y Mineral (S1) ed Matrix (S4) x (S5)		Thin Dark Si Loamy Mucl Loamy Gley Depleted M 1) ✓ Redox Dark Depleted Da Redox Depr	urface ky Min ed Ma atrix (F Surfac ark Sur	(S9) <b>(LRR</b> eral (F1) ( trix (F2) F3) ce (F6) face (F7)	R, MLRA 149B) (LRR K, L)	<ul> <li>2 cm Muck (A10) (LRR K, L, MLRA 149B)</li> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149E</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul>
	ydrophytic vege	tation	and wetland hyc	Irolog	y must be	e present, unless disturb	ed or problematic.
dicators of hy							
	r (if observed):					Hydric Soil Present?	Yes 🖌 No
	r (if observed):		None	-		nyane son resent.	
strictive Laye	r (if observed):		None	<u>-</u>			ies <u>/</u> ino



Soil Photos

Photo of Sample Plot North



Photo of Sample Plot West

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25	
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-03_UPL-1	
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Rang	ge: NA	
Landform (hillslope, terrace, etc.): Toe	Local relief (concave, convex, n	one): Convex Slope (%): 0 to 1	1
Subregion (LRR or MLRA): LRR L	Lat: 42.8716629558	Long: -74.4777053968 Datum: WGS84	
Soil Map Unit Name: Lansing silt loam, 15 to 2	5 percent slopes	NWI classification:	
Are climatic/hydrologic conditions on the site type	cal for this time of year? Yes 🧹 No	_ (If no, explain in Remarks.)	
		cumstances" present? Yes 🟒 No ain any answers in Remarks.)	

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL.			

### HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one	is required; check all th	<u>iat apply)</u>	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Image</li> <li>Sparsely Vegetated Concave Surfation</li> </ul>	— Aquatic — Marl De — Hydroge — Oxidized — Presenc — Recent I — Thin Mu ery (B7) — Other (E	tained Leaves (B9) Fauna (B13) posits (B15) en Sulfide Odor (C1) d Rhizospheres on Living Roots (C3) e of Reduced Iron (C4) ron Reduction in Tilled Soils (C6) ick Surface (C7) Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?     Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	
(includes capillary fringe)			
Describe Recorded Data (stream gau	ge, monitoring well, ae	rial photos, previous inspections), if	available:
Remarks:			

### Sampling Point: W-NSD-03\_UPL-1

ree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	0	(A)
. Tsuga canadensis	30	Yes	FACU	Are OBL, FACW, or FAC:	0	(A)
Acer saccharum	15	Yes	FACU	Total Number of Dominant Species	; 4	(B)
Ostrya virginiana	10	No	FACU	Across All Strata:		(0)
				Percent of Dominant Species That	0	(A/B
				Are OBL, FACW, or FAC:		
				Prevalence Index worksheet:		
	,			- <u>Total % Cover of:</u>	<u>Multiply</u>	-
	55	= Total Cov	er	- OBL species 0	x 1 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FACW species 0	x 2 =	0
Hamamelis virginiana	5	Yes	FACU	FAC species 10	x 3 =	30
*		103	TACO	FACU species 110	x 4 =	440
				UPL species 0	x 5 =	0
·		<u> </u>		Column Totals 120	(A)	470 (B
		·		Prevalence Index = B/A =	3.9	
				Hydrophytic Vegetation Indicators:		
		·		1- Rapid Test for Hydrophytic		1
				2 - Dominance Test is > 50%	.0	
	5	= Total Cov	er	$3 - Prevalence Index is \le 3.0^1$		
erb Stratum (Plot size: <u>5 ft</u> )				4 - Morphological Adaptation	s <sup>1</sup> (Provide	supportir
. Parthenocissus quinquefolia	50	Yes	FACU	- data in Remarks or on a separate s		sapporti
. Amphicarpaea bracteata	10	No	FAC	Problematic Hydrophytic Veg		(plain)
				<sup>1</sup> Indicators of hydric soil and wetlan		
				present, unless disturbed or proble	,	8,
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) o	or more in (	diameter
		······································		breast height (DBH), regardless of		
		·		Sapling/shrub – Woody plants less	-	OBH and
		······································		greater than or equal to 3.28 ft (1 r		
0.		······································		Herb – All herbaceous (non-woody	) plants, reg	gardless o
1		·		size, and woody plants less than 3.	28 ft tall.	5
2				Woody vines – All woody vines grea	ater than 3	.28 ft in
2		- Total Cris	or	height.		
	60	= Total Cov	ei	Hydrophytic Vegetation Present?	Yes N	
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )						···
·				-		
•				-		
·				-		
				-		
	0	= Total Cov	er			

SOIL

Depth	Matrix	to the de	•	Features	indicator or o	onfirm the absei	ice of indicato	ors.)
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 14	10YR 3/3	100				Silt Loam		
		·						
		·						
		·						
	oncontration D -		PM = Poducod	Matrix MS -	Masked San	d Grains 21 ocat	ion: PL - Porc	e Lining, M = Matrix.
Hydric Soil I		Depietio	n, rivi – Reduced	iviau i, ivis -	waskeu sall			roblematic Hydric Soils <sup>3</sup> :
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	n Sulfide (A4) d Layers (A5) d Below Dark Surfa rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) <b>(LRR R, M</b>	1LRA 14	Depleted Dar Redox Depres 9 <b>B)</b>	v Mineral (F1) d Matrix (F2) rix (F3) urface (F6) k Surface (F7 ssions (F8)	(LRR K, L) )	)B)       	_ Coast Prairie _ 5 cm Mucky _ Dark Surface _ Polyvalue Be _ Thin Dark Su _ Iron-Mangae _ Piedmont Fl _ Mesic Spodi _ Red Parent I _ Very Shallov _ Other (Expla	A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) oodplain Soils (F19) (MLRA 149B) c (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Remarks)
	of hydrophytic veg ayer (if observed):		and wetland hydr	ology must b	e present, ur	less disturbed o	r problematic.	
	Type: Depth (inches):		None		Hydric Soil	Present?	Yes	No
Remarks: Digging rest	riction due to root	s.						

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25					
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-04_PEM-1					
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Range:	NA					
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, nor	e): Concave Slope (%): 0 to	1				
Subregion (LRR or MLRA): LRR L	Lat: 42.8705936345 Lo	ng: -74.4750333299 Datum: WGS84					
Soil Map Unit Name: Lansing silt loam, 15 to 25 p	ercent slopes	NWI classification:					
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circu	mstances" present? Yes 🟒 No					
Are Vegetation, Soil, or Hydrology	naturally problematic?     (If needed, explair	any answers in Remarks.)					

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-04
Remarks: (Explain alternative procedur	res here or in a separate re	port)	
Covertype is PEM.			

#### HYDROLOGY

Wetland Hydrology Indicators:         Primary Indicators (minimum of or         ✓         Surface Water (A1)         ✓         High Water Table (A2)         ✓         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Ima         Sparsely Vegetated Concave Su	Water-S Aquatic Marl De Hydroga Oxidized Presend Recent Thin Mu Thin Mu agery (B7)Other (E	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream g	Yes _✔_ No Yes _✔_ No Yes _✔_ No auge, monitoring well, ae	Depth (inches): Depth (inches): Depth (inches): rrial photos, previous inspe	2 0 0 ections), if	Wetland Hydrology Present? Yes No available:
Remarks:				

Sampling Point: W-NSD-04\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
		Species?	Status	_ Number of Dominant Species T Are OBL, FACW, or FAC:	hat 2	(A)
				Total Number of Dominant Spe	cies 2	(B)
				<ul> <li>Across All Strata:</li> <li>Percent of Dominant Species The Percent of Domina</li></ul>		
				- Are OBL, FACW, or FAC:	100 International	(A/B)
·				- Prevalence Index worksheet:		
				- <u>Total % Cover of:</u>	Multiply	By:
·				– OBL species 57	x 1 =	57
	0	= Total Cov	er	FACW species 25	x 2 =	50
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 7	x 3 =	21
·				– FACU species 0	x 4 =	0
				– UPL species 0	x 5 =	0
				– Column Totals 89	(A)	128 (B
·				Prevalence Index = B/		120 (D
·				- Hydrophytic Vegetation Indicate	ors:	
·				1- Rapid Test for Hydrophy		ו
	0	= Total Cov	or	2 - Dominance Test is >50	%	
erb Stratum (Plot size: <u>5 ft</u> )	0		ei	$4$ 3 - Prevalence Index is $\leq 3$		
. Leersia oryzoides	40	Yes	OBL	4 - Morphological Adaptat		supportin
Impatiens capensis	20	Yes	FACW	- data in Remarks or on a separa		
. Juncus effusus	12	No	OBL	Problematic Hydrophytic	0	
. Euthamia graminifolia	7	No	FAC	<ul> <li>Indicators of hydric soil and we</li> </ul>	-	igy must b
. Typha angustifolia		No	OBL	_ present, unless disturbed or pre		
. Mentha arvensis	5	No	FACW	<ul> <li>Definitions of Vegetation Strata</li> <li>Tree – Woody plants 3 in. (7.6 cr</li> </ul>		diamotor
				breast height (DBH), regardless		
				Sapling/shrub – Woody plants le		DBH and
·				greater than or equal to 3.28 ft		
0.				Herb – All herbaceous (non-woo		gardless o
				size, and woody plants less that		-
1 2				Woody vines – All woody vines	greater than 3	.28 ft in
	89	= Total Cov	er	height.		
Voody Vine Stratum (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Preser	nt?Yes 🧹 I	No
·				-		
··				-		
·				-		
·	0	= Total Cov	er	-		

#### SOIL

### Sampling Point: W-NSD-04\_PEM-1

Depth Matrix	o the d	epth needed to o Redox			ndicator or confirm	the absence of indicat	ors.)
(inches) Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 18 10YR 3/2	90	5YR 4/6	10	С		y Clay Loam	
	<u> </u>						
			_				
	_						
			· <u> </u>				
Type: C = Concentration, D = D	epleti	on, RM = Reduce	d Mat	rix, MS =	Masked Sand Grains		e Lining, M = Matrix. Problematic Hydric Soils³:
Histosol (A1)		Polyvalue Br	2 1010	urface (S	8) (LRR R, MLRA 149	<b>D</b>	5
Histosof (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surfac Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, Mi		Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma ) ✓ Redox Dark Depleted Da Redox Depr	urface ky Min ed Ma atrix (F Surfac urk Surfac	(S9) <b>(LRR</b> eral (F1) ( trix (F2) F3) ce (F6) face (F7)	R, MLRA 149B) (LRR K, L)	Coast Prairi 5 cm Mucky Dark Surface Polyvalue B Thin Dark S Thin Dark S Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo	(A10) (LRR K, L, MLRA 149B) ie Redox (A16) (LRR K, L, R) / Peat or Peat (S3) (LRR K, L, R) ie (S7) (LRR K, L) ielow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) urface (S9) (LRR K, L) inese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
Indicators of hydrophytic vege	tation	and wetland hyd	rolog	y must be	e present, unless dis I	turbed or problematic	
Restrictive Layer (if observed):		Nega			Lhuduia Cail Duasanti	-	Vec ( Ne
Type: Depth (inches):		None			Hydric Soil Present	<i>:</i>	Yes 🯒 No
Remarks:							

Hydrology Photos



Soil Photos

Photo of Sample Plot North



Photo of Sample Plot South

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25					
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-04_UPL-1					
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Range:	NA					
Landform (hillslope, terrace, etc.): Toe	Local relief (concave, convex, none	e): Convex Slope (%): 1 to 3					
Subregion (LRR or MLRA): LRR L	Lat: 42.8708273219 Lon	g: -74.4759460353 Datum: WGS84					
Soil Map Unit Name: Lansing silt loam, 15 to 25 p	ercent slopes	NWI classification:					
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)							
	significantly disturbed? Are "Normal Circur naturally problematic? (If needed, explain	nstances" present? Yes 🖌 No any answers in Remarks.)					

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL.			

### HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)				
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Surface</li> </ul>	Aquatio Marl D Hydrog Oxidize Presen Recent Thin M gery (B7) Other (	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:					
Surface Water Present?	Yes No 🟒	Depth (inches):	_		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?   Yes No		
Saturation Present?	Yes No 🟒	Depth (inches):			
(includes capillary fringe)					
	auge, monitoring well, a	erial photos, previous inspections), if	available:		
Remarks:					

Sampling Point: W-NSD-04\_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
1 A		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	<sup>nt</sup> 2	(A)
1. Acer saccharum	25	Yes	FACU	Total Number of Dominant Specie		
2. <i>Tsuga canadensis</i> 3.	20	Yes	FACU	Across All Strata:	5	(B)
				Percent of Dominant Species Tha	t <b>40</b>	(4 (D)
				Are OBL, FACW, or FAC:	40	(A/B)
				Prevalence Index worksheet:		
7				Total % Cover of:	<u>Multiply</u>	<u>By:</u>
	45	= Total Cov	or	OBL species 0	x 1 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )	45	- 10tai COV	CI	FACW species 10	x 2 =	20
	15	Yes	FACU	FAC species 25	x 3 =	75
. Hamamelis virginiana		105	Inco	FACU species 65	x 4 =	260
				UPL species 0	x 5 =	0
				Column Totals 100	(A)	355 (B
				Prevalence Index = B/A	= <u>3.6</u>	
				Hydrophytic Vegetation Indicators	5:	
				1- Rapid Test for Hydrophyti	c Vegetation	
·	15	= Total Cov	or	2 - Dominance Test is > 50%		
<u>-lerb Stratum</u> (Plot size: <u>5 ft</u> )	15	- 10tai COV	ei	$3$ - Prevalence Index is $\leq 3.0$	1	
. Amphicarpaea bracteata	20	Yes	FAC	4 - Morphological Adaptation		supportir
2. Impatiens capensis	10	Yes	FACW	data in Remarks or on a separate		
3. Polystichum acrostichoides	5	No	FACU	Problematic Hydrophytic Ve		
4. Parathelypteris noveboracensis	5	No	FAC	<sup>1</sup> Indicators of hydric soil and wetl	-	gy must b
5.		110	FAC	present, unless disturbed or prob	lematic	
6.				Definitions of Vegetation Strata:		
7.				Tree – Woody plants 3 in. (7.6 cm) breast height (DBH), regardless of		lameter
3.				Sapling/shrub – Woody plants less		)BH and
9.				greater than or equal to 3.28 ft (1		Dirana
10.				Herb – All herbaceous (non-wood		gardless o
11				size, and woody plants less than 3		<u>,</u>
12.				Woody vines – All woody vines gro	eater than 3.	.28 ft in
	40	= Total Cov	or	height.		
Noody Vine Stratum (Plot size: <u>30 ft</u> )	40	- 10001 000	CI	Hydrophytic Vegetation Present?	Yes N	lo 🟒
1.						
2.						
3.				•		
4.		·		•		
	0	= Total Cov	or	·		
	0	<u>-</u> 10tal COV	ei			

SOIL

	cription: (Describe	to the de	-			indicato	r or confirm the a	bsence of indicat	cors.)
Depth	Matrix		Redox						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 8	10YR 3/2	100					Silt Loam		
8 - 20	10YR 3/3	100		_			Silt Loam	. <u> </u>	
<sup>1</sup> Type: C = C	oncentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. <sup>2</sup> Le	ocation: PL = Por	e Lining, M = Matrix.
Hydric Soil	ndicators:							Indicators for F	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	58) <b>(LRR</b>	R, MLRA 149B)	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Su	rface	(S9) <b>(LRF</b>	R, MLR	A 149B)		ie Redox (A16) <b>(LRR K, L, R)</b>
Black Hi	stic (A3)		Loamy Muck	/ Mir	neral (F1)	(LRR K, I	_)		y Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye					-	ce (S7) (LRR K, L)
	d Layers (A5)		Depleted Ma						Below Surface (S8) <b>(LRR K, L)</b>
	d Below Dark Surfa	ace (A11)						-	Surface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Dar			)			anese Masses (F12) <b>(LRR K, L, R)</b>
-	lucky Mineral (S1)		Redox Depre	ssior	is (F8)			Piedmont F	loodplain Soils (F19) <b>(MLRA 149B)</b>
-	ileyed Matrix (S4)							Mesic Spod	lic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	edox (S5)							Red Parent	Material (F21)
	d Matrix (S6)							Very Shallo	w Dark Surface (TF12)
Dark Su	rface (S7) <b>(LRR R, N</b>	/ILRA 149	)B)					Other (Expl	ain in Remarks)
<sup>3</sup> Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must b	e preser	ıt, unless disturbe	d or problematio	
Restrictive I	ayer (if observed):	:							
	Туре:		None			Hydric	Soil Present?	Yes	No
	Depth (inches):								
Remarks:									

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Sprakers, Mor	itgomery County		Sampling Date:	2021-Aug-25
Applicant/Owner: S	unEast				State: NY		Sampling Point: \	W-NSD-05_PEM-2
Investigator(s): Nick	DeJohn, Briar	Corrigan		Se	ction, Township, Ra	nge: N/	4	
Landform (hillslope, te	rrace, etc.):	Depression		Local relie	ef (concave, convex,	, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLR	RA): LRR	L		Lat	t: 42.8653264046	Long:	-74.4772630838	Datum: WGS84
Soil Map Unit Name:	Water						NWI classific	ation:
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remai	rks.)
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "Normal (	Circumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed, ex	plain an	y answers in Rema	arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-05
Remarks: (Explain alternative procedur	es here or in a separate re	port)	
Covertype is PEM.			

### HYDROLOGY

Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Wetland Hydrology Indicators:				
✓ Surface Water (A1)	Primary Indicators (minimum of o	ne is required; check al	<u>ll that apply)</u>		Secondary Indicators (minimum of two required)
Surface Water Present? Yes _ ✓ No Depth (inches): 6   Water Table Present? Yes _ ✓ No Depth (inches): 0   Saturation Present? Yes _ ✓ No Depth (inches): 0   (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	<ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imm</li> </ul>	Aqua Marl Hydr Oxidi Prese Rece Thin nagery (B7) Othe	atic Fauna (B13) Deposits (B15) rogen Sulfide Odor (C1) ized Rhizospheres on Living R ence of Reduced Iron (C4) ent Iron Reduction in Tilled Soil Muck Surface (C7)		<ul> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> </ul>
Water Table Present? Yes    Yes  No   Saturation Present? Yes    Yes  No   Depth (inches): 0   Wetland Hydrology Present? Yes  Yes No O Depth (inches): 0 Wetland Hydrology Present? Yes No O Depth (inches): 0 Wetland Hydrology Present? Yes No O Depth (inches): 0 Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations:				
Saturation Present? Yes No Depth (inches):   (includes capillary fringe)   Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present?	Yes 🟒 No	Depth (inches):	6	_
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present?	Yes 🟒 No	Depth (inches):	0	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present?	Yes 🟒 No	Depth (inches):	0	_
	(includes capillary fringe)				
		auge, monitoring well,	aerial photos, previous inspe	ctions), if	available:

Sampling Point: W-NSD-05\_PEM-2

rea Stratum (Diat cize: 20 ft )	Absolute	Dominant	Indicator	Dominance Test worksheet:		
ree Stratum (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species T	hat 3	(A)
				Are OBL, FACW, or FAC:		
				Total Number of Dominant Spe Across All Strata:	cies 3	(B)
				<ul> <li>Percent of Dominant Species Th</li> </ul>		
				- Are OBL, FACW, or FAC:	100	(A/B)
		·		- Prevalence Index worksheet:		
		·		- <u>Total % Cover of:</u>	Multiply	By:
				– OBL species 55	x 1 =	55
	0	= Total Cov	er	FACW species 40	x 2 =	80
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x 3 =	0
				- FACU species 0	x 4 =	0
				– UPL species 0	x 5 =	0
				– Column Totals 95	(A)	135 (B
				Prevalence Index = B/		100 (0
				- Hydrophytic Vegetation Indicato		······
				1- Rapid Test for Hydrophy		,
				- ∠ 2 - Dominance Test is >509	-	1
	0	= Total Cov	er	$\checkmark$ 3 - Prevalence Index is $\leq$ 3		
<u>erb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adaptat		supportin
Leersia oryzoides	35	Yes	OBL	- data in Remarks or on a separa		Supportin
Bidens frondosa	30	Yes	FACW	<ul> <li>Problematic Hydrophytic \</li> </ul>		(plain)
. Typha angustifolia	20	Yes	OBL	<ul> <li>Indicators of hydric soil and we</li> </ul>	-	
. Impatiens capensis	10	No	FACW	present, unless disturbed or pro	-	8)
				Definitions of Vegetation Strata		
				Tree – Woody plants 3 in. (7.6 cr		diameter a
				breast height (DBH), regardless	of height.	
				Sapling/shrub – Woody plants le	ess than 3 in. l	OBH and
				greater than or equal to 3.28 ft	(1 m) tall.	
0.				Herb – All herbaceous (non-woo	ody) plants, re	gardless o
1				size, and woody plants less than		
2.		·		Woody vines – All woody vines g	greater than 3	.28 ft in
	95	= Total Cov	er	height.		
Voody Vine Stratum (Plot size: <u>30 ft</u> )		_		Hydrophytic Vegetation Presen	t?Yes 🖌 🛚	lo
· · · · · · · · · · · · · · · · · · ·						
		· ·		-		
				-		
				-		
	0	= Total Cov	or	-		

SOIL

hes) (	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
				_				
						<u> </u>		
		epletio	on, RM = Reduce	d Ma	trix, MS =	Masked S	Sand Grains. <sup>2</sup> L	ocation: PL = Pore Lining, M = Matrix.
i <mark>c Soil Indic</mark> listosol (A1)							MLRA 149B)	Indicators for Problematic Hydric Soils <sup>3</sup> :
hick Dark S andy Muck andy Gleye andy Redox tripped Ma	A3) ulfide (A4) yers (A5) low Dark Surfac urface (A12) y Mineral (S1) d Matrix (S4) < (S5)		Thin Dark Su Loamy Muck Depleted Ma ) Redox Dark Depleted Da Redox Depr	ky Mi ed M atrix Surfa urk Su	neral (F1) atrix (F2) (F3) ace (F6) urface (F7)	(LRR K, L)	-	<ul> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B)</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul>
		tation	and wetland hyc	Irolog	gy must b	e present	, unless disturbe	ed or problematic.
-	r (if observed):		Nono			Lludric C	oil Dracant?	Vac ( Na
Тур	e: th (inches):		None	-		Hydric S	oil Present?	Yes 🟒 No
arks:	un (inches).	_						

Hydrology Photos



Photo of Sample Plot East Photo of Sample Plot West



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creel	k Solar Projec	t	City/County:	Sprakers, Mont	gomery County		Sampling Date:	2021-Aug-25
Applicant/Owner: Su	unEast				State: NY		Sampling Point:	W-NSD-05_PSS-1
Investigator(s): Nick	DeJohn, Briar	n Corrigan		Sec	tion, Township,	Range: N	A	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	f (concave, conv	ex, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLR	RA): LRR	L		Lat:	42.865310059	9 Long:	-74.47651173	Datum: WGS84
Soil Map Unit Name:	Illion silt loa	m, 0 to 3 percen	t slopes				NWI classifi	cation:
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒 No	(If no	o, explain in Rema	irks.)
<b>u</b>		or Hydrology or Hydrology	0	5			tances" present? y answers in Rem	Yes 🟒 No arks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-05
Remarks: (Explain alternative procedu	res here or in a separate rep	ort)	
Covertype is PSS.			

### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	e is required;	check all that	apply)	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Su</li> </ul>	0,	Aquatic Fau Marl Depos Hydrogen S Oxidized Rl Presence o Recent Iror Thin Muck		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes No		Depth (inches):	
Water Table Present?	Yes No		Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No		Depth (inches):	
(includes capillary fringe)				
Describe Recorded Data (stream g	auge, monitori	ing well, aerial	photos, previous inspections), if	available:
Remarks:				

Sampling Point: W-NSD-05\_PSS-1

<u>Tree Stratum (Plot size:30 ft)</u>		Dominant	Indicator	Dominance Test worksheet:		
1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	4	(A)
2.				Total Number of Dominant Species	4	(B)
3				Across All Strata: Percent of Dominant Species That		
4				- Are OBL, FACW, or FAC:	100	(A/B)
5				Prevalence Index worksheet:		
5				- <u>Total % Cover of:</u>	Multiply B	<u>y:</u>
7				- OBL species 0	x 1 =	0
	0	= Total Cov	er	FACW species 75	x 2 =	150
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 30	x 3 =	90
. Salix alba	40	Yes	FACW	FACU species 0	x 4 =	0
2. <u>Cornus racemosa</u>	15	Yes	FAC	UPL species 0	x 5 =	0
3				Column Totals 105	(A)	240 (B)
4				Prevalence Index = B/A =	· · · · · · · · · · · · · · · · · · ·	
5 6.				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic	Vegetation	
	55	= Total Cov	or	2 - Dominance Test is >50%		
Herb Stratum (Plot size: <u>5 ft</u> )		- 10141 COV	ei	$\_$ ✓ 3 - Prevalence Index is $\leq 3.0^1$		
1. Impatiens capensis	35	Yes	FACW	4 - Morphological Adaptations	s <sup>1</sup> (Provide si	upporting
2. Cornus racemosa	15	Yes	FAC	data in Remarks or on a separate s		
3.		163	FAC	Problematic Hydrophytic Vege		
4.				<sup>1</sup> Indicators of hydric soil and wetlar	, 0,	y must be
				present, unless disturbed or proble	ematic	
5				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) c		ameter a
7				breast height (DBH), regardless of h		ام مرم ا
8				Sapling/shrub – Woody plants less greater than or equal to 3.28 ft (1 n		SH and
9				Herb – All herbaceous (non-woody)		ordloss of
10				size, and woody plants less than 3.2		
11				Woody vines – All woody vines grea		8 ft in
12				height.		
	50	= Total Cov	er	Hydrophytic Vegetation Present?	Yes 🗸 No	)
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Tydrophytic vegetation resent.	105 <u>v</u> 140	,
1				-		
2				-		
3				-		
4				-		
	0	= Total Cov	er			

SOIL

chess       Color (moist)       %       Color (moist)       %       Type!       Loc?       Texture       Remarks         2-20       10YR 3/2       95       10YR 4/6       5       C       M       Silt Loam		Matrix		Redox					osence of indicators.)
2.20       10YR 3/2       95       10YR 4/1       5       D       M       Silty Clay Loam         2.20       10YR 3/2       95       10YR 4/1       5       D       M       Silty Clay Loam         2.20       10YR 3/2       95       10YR 4/1       5       D       M       Silty Clay Loam         2.20       10YR 3/2       95       10YR 4/1       5       D       M       Silty Clay Loam         2.20       10YR 3/2       95       10YR 4/1       5       D       M       Silty Clay Loam         2.20       10YR 3/2       95       10YR 4/1       5       D       M       Silty Clay Loam         2.20       10YR 3/2       95       10YR 4/1       5       D       M       Silty Clay Loam         2.20       10It Cars       10       10       Polyalue Below Surface (S8) (LRR K, MLRA 149B)       -       Coast Prairie Redox (A16) (LRR K, L R)         11stocol (A1)       Polyalue Below Surface (S9) (LRR K, L)       -       Coast Prairie Redox (A16) (LRR K, L R)       -       S cm Muck (A10) (LRR K, L R)       -       Coast Prairie Redox (A16) (LRR K, L R)       -       D chark Surface (S9) (LRR K, L)       -       -       Coast Prairie Redox (A16) (LRR K, L R)       -       D coast Surface (S	ches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu	ire Remarks
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. <sup>2</sup> Location: PL = Pore Lining, M = Matrix.         Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosol (A1)	- 12	10YR 3/2	95	10YR 4/6	5	C	M	Silt Lo	pam
dric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)      2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)      Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)      Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Dark Surface (S9) (LRR K, L, P)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)      Thin Dark Surface (F7)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)      Iron-Manganese Masses (F12) (LRR K, L, R)         Sandy Gleyed Matrix (S4)	2 - 20	10YR 3/2	95	10YR 4/1	5	D	М	Silty Clay	/ Loam
tric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)      2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)      Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)      Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Coast Or Peat (S3) (LRR K, L, R)         Stratified Layers (A5)      Depleted Matrix (F3)      Dark Surface (S7) (LRR K, L)         Depleted Below Dark Surface (A11)      Redox Dark Surface (F6)      Thin Dark Surface (S9) (LRR K, L, R)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)									
Indicators:       Indicators:         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)      Dolyvalue Below Surface (S9) (LRR K, L)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Redox (S5)      Depleted Matrix (S4)         Sandy Redox (S5)      Redox Depresent, unless disturbed or problematic.         Trictive Layer (if observed):									
tric Soil Indicators:       Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)      2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)      Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)      Coast Prairie Redox (A16) (LRR K, L, R)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Coast Or Peat (S3) (LRR K, L, R)         Stratified Layers (A5)      Depleted Matrix (F3)      Dark Surface (S7) (LRR K, L)         Depleted Below Dark Surface (A11)      Redox Dark Surface (F6)      Thin Dark Surface (S9) (LRR K, L, R)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)									
Indicators:       Indicators:         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histic Epipedon (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)      Dolyvalue Below Surface (S9) (LRR K, L)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Redox (S5)      Depleted Matrix (S4)         Sandy Redox (S5)      Redox Depresent, unless disturbed or problematic.         Trictive Layer (if observed):						<u> </u>			
Indicators:       Indicators:         Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Histosol (A2)      Thin Dark Surface (S9) (LRR R, MLRA 149B)         Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)         Stratified Layers (A5)      Depleted Matrix (F3)         Depleted Below Dark Surface (A11)        Redox Dark Surface (F6)         Thick Dark Surface (A12)      Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)      Redox Depressions (F8)         Sandy Redox (S5)      Redox Depressions (F8)         Stripped Matrix (S6)									
ric Soil Indicators: Histosol (A1)Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2)Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3)Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2) Stratified Layers (A5)Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6)<br Thick Dark Surface (A12)Depleted Dark Surface (F7) Stratified Layers (S4) Sandy Mucky Mineral (S1)Redox Depressions (F8) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type:None Depth (inches):None Depth (inches):NoneNone Mexic Soil Present? Yes No									
ric Soil Indicators: Histosol (A1)Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2)Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3)Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) / Redox Dark Surface (F6) Thick Dark Surface (A12)Depleted Dark Surface (F7) Hick Dark Surface (A12)Depleted Dark Surface (F7) Sandy Mucky Mineral (S1)Redox Depressions (F8) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type:None Depth (inches):NoneNone Mexic Soil Present? YesNo	·								
Histosol (A1)      Polyvalue Below Surface (S8) (LRR R, MLRA 149B)      2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)	e: C = C	oncentration, D = I	Depletio	on, RM = Reduced	d Mat	rix, MS =	Masked Sand (	irains. <sup>2</sup> Lo	ocation: PL = Pore Lining, M = Matrix.
Histic Epipedon (A2)	ric Soil I	ndicators:							Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)				-					2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
Black Histic (A3)      Loamy Mucky Mineral (F1) (LRR K, L)      5 cm Mucky Peat or Peat (S3) (LRR K, L, R)         Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Dark Surface (S7) (LRR K, L)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)								)	
Hydrogen Sulfide (A4)      Loamy Gleyed Matrix (F2)      Dark Surface (S7) (LRR K, L)         Stratified Layers (A5)      Depleted Matrix (F3)      Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11) // Redox Dark Surface (F6)		( )			-		(LRR K, L)		
Stratified Layers (A5)									-
Depieted Below Dark Surface (A11) Redox Dark Surface (F6)   Thick Dark Surface (A12) Depleted Dark Surface (F7)   Sandy Mucky Mineral (S1) Redox Depressions (F8)   Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 149B)   Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)   Stripped Matrix (S6) Red Parent Material (F21)   Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12)   Licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   trictive Layer (if observed):   Type:   None   Depth (inches):									
Inick Dark Surface (A12)			ace (A11						
Sandy Mucky Mineral (S1)									
Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)   Sandy Redox (S5) Red Parent Material (F21)   Stripped Matrix (S6) Very Shallow Dark Surface (TF12)   Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)   licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   trictive Layer (if observed):   Type:   None   Depth (inches):   Hydric Soil Present? Yes No	Sandy M	ucky Mineral (S1)		Redox Depre	essior	ıs (F8)			
Sandy Redox (S5)	Sandy G	eyed Matrix (S4)							-
Stripped Matrix (S6)	Sandy Re	edox (S5)							
Dark Surface (S7) (LRR R, MLRA 149B)	Stripped	Matrix (S6)							
licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. trictive Layer (if observed): Type:NoneHydric Soil Present? Yes _✓_ No Depth (inches):	Dark Sur	face (S7) <b>(LRR R, M</b>	ILRA 14	·9B)					
Type:     None     Hydric Soil Present?     Yes _ / No       Depth (inches):	licators o	of hydrophytic veg	etation	and wetland hyd	rolog	y must be	e present, unle	s disturbe	
Depth (inches):	trictive L	ayer (if observed):							
		Гуре:		None	_		Hydric Soil Pr	esent?	Yes 🟒 No
		Depth (inches):			-				
		Jepth (inches):					1		

## Soil Photos



Photo of Sample Plot South Photo of Sample Plot West



## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-27
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-05_PUB-3
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Rai	nge: NA
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex,	none): Concave Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8656477249	Long: -74.484609319 Datum: WGS84
Soil Map Unit Name: Illion silt loam, 0 to 3 perce	nt slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	I for this time of year? Yes 🟒 No	(lf no, explain in Remarks.)
Are Vegetation,       Soil,       or Hydrology         Are Vegetation,       Soil,       or Hydrology	0	ircumstances" present? Yes 🟒 No lain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-05
Remarks: (Explain alternative procedur	res here or in a separate re	port)	
Covertype is PUB.			

#### HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Sparsely Vegetated Concave Su	Water- Aquatio Marl D Hydrog Oxidize Presen Recent Thin M agery (B7) Other (	hat apply) Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living F ice of Reduced Iron (C4) Iron Reduction in Tilled So uck Surface (C7) Explain in Remarks)		Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream g	Yes _∠_ No Yes _∠_ No Yes _∠_ No auge, monitoring well, ad	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspe	48 0 0 ections), if	Wetland Hydrology Present? Yes No
Remarks:				

Sampling Point: W-NSD-05\_PUB-3

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
2.				Total Number of Dominant Species	1	(B)
				Percent of Dominant Species That	100	 (A/B)
5.				Are OBL, FACW, or FAC:		
5.				Prevalence Index worksheet: <u>Total % Cover of:</u>	Multiply B	<i>.</i>
7.				- OBL species 5	<u>мицару</u> х1=	<u>6</u> 5
	0	= Total Cov	er	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FAC species 0	x 2 =	0
					·	
2.				- FACU species 0	x 4 =	0
3.				- UPL species 0	x 5 =	0
				- Column Totals 5	(A)	5 (B)
· · · · · · · · · · · · · · · · · · ·				Prevalence Index = B/A =		
		·		Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetation	
·	0	= Total Cov	er	2 - Dominance Test is >50%		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )	0		CI	$\_$ ✓ 3 - Prevalence Index is $\leq 3.0^1$		
. Typha angustifolia	5	Yes	OBL	4 - Morphological Adaptations	s¹ (Provide su	pporting
		165	UBL	- data in Remarks or on a separate s	heet)	
2 3				Problematic Hydrophytic Veg	etation <sup>1</sup> (Expl	lain)
				<sup>1</sup> Indicators of hydric soil and wetla	nd hydrology	must be
4				present, unless disturbed or proble	ematic	
5				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) o	or more in dia	ameter a
7				breast height (DBH), regardless of l	height.	
3.				Sapling/shrub – Woody plants less	than 3 in. DB	H and
).				greater than or equal to 3.28 ft (1 n	n) tall.	
0.				Herb – All herbaceous (non-woody		rdless of
11				size, and woody plants less than 3.	28 ft tall.	
2.				Woody vines – All woody vines grea	ater than 3.28	8 ft in
	5	= Total Cov	er	height.		
Woody Vine Stratum (Plot size: <u>30 ft</u> )			-	Hydrophytic Vegetation Present?	Yes 🟒 No	
1.						
2.				-		
3.				-		
				-		
4				-		
	0	= Total Cov	er			

epth <u>Matrix</u> iches) Color (moist)	Redox	Features		bsence of indicators.)
<u> </u>	% Color (moist)		Loc <sup>2</sup> Texture	Remarks
		·		
	pletion, RM = Reduced	Matrix, MS = N	lasked Sand Grains. <sup>2</sup> L	.ocation: PL = Pore Lining, M = Matrix.
fric Soil Indicators:	<u></u>			Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) <b>(LRR R, MLF</b>	Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat e (A11) Redox Dark S Depleted Dar Redox Depres	face (S9) <b>(LRR</b> / Mineral (F1) <b>(I</b> d Matrix (F2) rix (F3) urface (F6) k Surface (F7)		<ul> <li>2 cm Muck (A10) (LRR K, L, MLRA 149B)</li> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B)</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul>
licators of hydrophytic vegeta	ation and wetland hydr	ology must be	present, unless disturb	ed or problematic.
trictive Layer (if observed):				
Type:	None		Hydric Soil Present?	Yes 🟒 No
Depth (inches):				
e to inundation a clear soil pr	one was unobtainable.		ned to be nyune.	

#### Hydrology Photos



Photo of Sample Plot North



Photo of Sample Plot East



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25					
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-05_UPL-1					
Investigator(s): Nick DeJohn, Brian Corrigan Section, Township, Range: NA							
Landform (hillslope, terrace, etc.): Low Hill	Local relief (concave, convex, nor	e): Convex Slope (%): 1 to 3					
Subregion (LRR or MLRA): LRR L	Lat: 42.8655302944 Lo	ng: -74.476632597 Datum: WGS84					
Soil Map Unit Name: Darien silt loam, 3 to 8 pe	rcent slopes	NWI classification:					
Are climatic/hydrologic conditions on the site type	cal for this time of year? Yes _∠_ No (I	f no, explain in Remarks.)					
		mstances" present? Yes 🟒 No any answers in Remarks.)					

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedur	es here or in a separate repo	rt)	
Covertype is UPL.			

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on 	Water-S Aquatic Marl De Hydrog Oxidize Presend Recent Thin Mu agery (B7) Other (	Secondary Indicators (minimum of Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Im Stunted or Stressed Plants (D' Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)	hagery (C9)	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream ga	Yes No Yes No Yes No auge, monitoring well, ae	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspections), if	- Wetland Hydrology Present? - available:	Yes No <b>/</b>
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-05\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species Tha	+	
		<u> </u>	Status	Are OBL, FACW, or FAC:	<sup>n</sup> 3	(A)
				Total Number of Dominant Specie	es 4	(B)
				Across All Strata:		(8)
				Percent of Dominant Species Tha	t 75	(A/B)
·				Are OBL, FACW, or FAC: Prevalence Index worksheet:		
				Total % Cover of:	Multiply	Bv:
·				OBL species 0	x 1 =	<u></u> 0
	0	= Total Cov	er	FACW species 0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 40	x 3 =	120
Lonicera morrowii	30	Yes	FACU	FACU species 30	x 4 =	120
Cornus racemosa	10	Yes	FAC	UPL species 5	x 5 =	25
				Column Totals 75	(A)	265 (B
·		·		Prevalence Index = B/A		
		<u> </u>		Hydrophytic Vegetation Indicators	5:	
				1- Rapid Test for Hydrophyti		n
·				∠ 2 - Dominance Test is >50%	0	
	40	= Total Cov	er	3 - Prevalence Index is $\leq$ 3.0	1	
erb Stratum (Plot size: <u>5 ft</u> )	20		FAC	4 - Morphological Adaptation	ns¹ (Provide	supportin
Cornus racemosa		Yes	FAC	data in Remarks or on a separate	sheet)	
<i>Rhamnus cathartica</i>		Yes	FAC	Problematic Hydrophytic Ve	getation <sup>1</sup> (E>	(plain)
. Fragaria vesca	5	No	UPL	<sup>1</sup> Indicators of hydric soil and weth		gy must b
				present, unless disturbed or prob	lematic	
				Definitions of Vegetation Strata:		
		<u> </u>		Tree – Woody plants 3 in. (7.6 cm)		diameter a
·				breast height (DBH), regardless o	-	
·				Sapling/shrub – Woody plants les greater than or equal to 3.28 ft (1		JBH and
				Herb – All herbaceous (non-wood		ardless o
0		<u> </u>		size, and woody plants less than 3		garaiess o
1				Woody vines – All woody vines gr		.28 ft in
2				height.		
	35	= Total Cov	er	Hydrophytic Vegetation Present?	Yes 🖌 N	10
Voody Vine Stratum (Plot size: <u>30 ft</u> )					· · · · · · · · · · · · · · · · · · ·	
				•		
·				•		
	0	- Total Carr	or	•		
	0	= Total Cov	ei			

Depth	ription: (Describe Matrix	to the d	•	Features	indicator or c	onfirm the abse	nce of indicate	ors.)
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 11	10YR 3/2	100				Silt Loam		
		·						
		·						
		·						
Type: C = C	oncentration, D =	Depletic	on, RM = Reduced	Matrix, MS =	Masked Sand	l Grains. 2Loca	tion: PL = Pore	e Lining, M = Matrix.
lydric Soil I	ndicators:					In	dicators for P	roblematic Hydric Soils <sup>3</sup> :
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Strippec Dark Su	n Sulfide (A4) d Layers (A5) d Below Dark Surfa rk Surface (A12) lucky Mineral (S1) leyed Matrix (S4) edox (S5) l Matrix (S6) rface (S7) <b>(LRR R, M</b>	1LRA 14	Depleted Dar Redox Depres 9 <b>B)</b>	v Mineral (F1) d Matrix (F2) rix (F3) urface (F6) k Surface (F7 ssions (F8)	(LRR K, L) )		_ 5 cm Mucky _ Dark Surface _ Polyvalue Be _ Thin Dark Se _ Iron-Mangae _ Piedmont Fl _ Mesic Spodi _ Red Parent l _ Very Shallov _ Other (Expla	v Dark Surface (TF12) ain in Remarks)
	of hydrophytic veg .ayer (if observed):		and wetland hydr	ology must b	e present, un	less disturbed o	r problematic.	
	Type: Depth (inches):		None		Hydric Soil	Present?	Yes	No
Remarks: Digging rest	riction due to root	-S .						

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-25							
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-05_UPL-2							
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Rang	e: NA							
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, n	one): Undulating Slope (%): 0 t	to 1						
Subregion (LRR or MLRA): LRR L	Lat: 42.8653915739	ong: -74.4772320707 Datum: WGS8	84						
Soil Map Unit Name: Darien silt loam, 3 to 8 percent	ent slopes	NWI classification:							
Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)									
		cumstances" present? Yes 🟒 No in any answers in Remarks.)	_						
		and any answers in Kernario.							

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL.			

## HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)				
	Surface Water (A1)       Water-Stained Leaves (B9)        High Water Table (A2)      Aquatic Fauna (B13)        Saturation (A3)      Marl Deposits (B15)        Water Marks (B1)      Hydrogen Sulfide Odor (C1)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)        Drift Deposits (B3)      Presence of Reduced Iron (C4)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:					
Surface Water Present?	Yes No 🟒	Depth (inches):	_		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?   Yes No		
Saturation Present?	Yes No 🟒	Depth (inches):			
(includes capillary fringe)					
	auge, monitoring well, a	erial photos, previous inspections), if	available:		
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-05\_UPL-2

<u>Free Stratum</u> (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test workshee			
	% Cover	Species?	Status	Number of Dominant Spe	cies That	0	(A)
				Are OBL, FACW, or FAC:			
				Total Number of Dominar Across All Strata:	it Species	2	(B)
				Percent of Dominant Spec	ios That		
				- Are OBL, FACW, or FAC:		0	(A/B)
				Prevalence Index workshe	et:		
				- Total % Cover of:		Multiply	Bv:
·		·		- OBL species	0	x 1 =	0
	0	= Total Cov	er	FACW species	15	x 2 =	30
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species	0	x 3 =	0
				- FACU species	25	x 4 =	100
				- UPL species	50	x 5 =	250
				- Column Totals	90	(A)	380 (B)
				- Prevalence Inde		· · · -	223 (D
·		·		Hydrophytic Vegetation Ir			
·		·		- 1- Rapid Test for Hyd		'egetation	'n
	·			2 - Dominance Test i		6800000	•
	0	= Total Cov	er	3 - Prevalence Index			
<u>erb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Ac	laptations <sup>1</sup>	(Provide	supporting
Medicago sativa	30	Yes	UPL	- data in Remarks or on a s			
Solidago canadensis	25	Yes	FACU	Problematic Hydrop	hytic Veget	tation <sup>1</sup> (Ex	(plain)
Asclepias syriaca	15	No	UPL	<sup>1</sup> Indicators of hydric soil a	nd wetland	d hydrolo	gy must b
. Mentha arvensis	10	No	FACW	present, unless disturbed	or probler	natic	
. Daucus carota	5	No	UPL	Definitions of Vegetation	Strata:		
. Phalaris arundinacea	5	No	FACW	Tree – Woody plants 3 in.	(7.6 cm) or	more in	diameter a
				breast height (DBH), rega		-	
				Sapling/shrub – Woody pl			OBH and
				greater than or equal to 3			
0				Herb – All herbaceous (no			gardless o
1				size, and woody plants les			20.6
2				<ul> <li>Woody vines – All woody</li> <li>height.</li> </ul>	ines great	er than 3	.28 IUM
	90	= Total Cov	er				
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation F	resent? Y	'es l	No 🔽
				-			
				-			
				-			
				_			
	0	= Total Cov	er				

Pepth	Matrix			Feature	-			
nches)	Color (moist)	%	Color (moist)	<u>%</u> Ty	/pe¹ l	LOC <sup>2</sup> Texture	e	Remarks
) - 18	10YR 4/3	100				Silt Loa	m	
		· <u> </u>						
		· . <u></u>		- — —				
		·		- — —				
		·		- — —				
		·		- — —				
		Depletio	n, RM = Reduced	l Matrix,	MS = Ma	asked Sand Grains. <sup>2</sup>		e Lining, M = Matrix.
	Indicators:						Indicators for P	roblematic Hydric Soils <sup>3</sup> :
Histoso	. ,					(LRR R, MLRA 149B)	2 cm Muck	(A10) <b>(LRR K, L, MLRA 149B)</b>
	pipedon (A2)		Thin Dark Su				Coast Prairi	e Redox (A16) <b>(LRR K, L, R)</b>
	istic (A3)		Loamy Muck			RR K, L)	5 cm Mucky	/ Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye		(F2)		Dark Surfac	e (S7) <b>(LRR K, L)</b>
	ed Layers (A5)		Depleted Ma				Polyvalue B	elow Surface (S8) <b>(LRR K, L)</b>
Jepiete	I Delever Deele Courfe			SUITTACE (I	-6)		Thin David C	urface (S9) <b>(LRR K, L)</b>
	ed Below Dark Surfa	ace (A11					Thin Dark S	unace (39) <b>(LKK K, L)</b>
Thick Da	ark Surface (A12)	ace (A11)	Depleted Da	rk Surfac	e (F7)			inese Masses (F12) (LRR K, L, R)
Thick Da Sandy N	ark Surface (A12) Mucky Mineral (S1)	ace (A11)		rk Surfac	e (F7)		Iron-Manga	
Thick Da Sandy N Sandy C	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)	ace (A11	Depleted Da	rk Surfac	e (F7)		Iron-Manga Piedmont F	nese Masses (F12) <b>(LRR K, L, R)</b>
Thick Da Sandy N Sandy C Sandy F	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5)	ace (A11)	Depleted Da	rk Surfac	e (F7)		Iron-Manga Piedmont F	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b>
Thick Da Sandy N Sandy C Sandy F Strippe	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6)		Depleted Dai Redox Depre	rk Surfac	e (F7)		Iron-Manga Piedmont F Mesic Spod Red Parent	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b>
Thick Da Sandy N Sandy C Sandy F Strippe	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5)		Depleted Dai Redox Depre	rk Surfac	e (F7)		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallon	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21)
Thick Da Sandy N Sandy G Sandy F Stripped Dark Su	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b>	1LRA 149	Depleted Dar Redox Depre 9 <b>B)</b>	rk Surfac essions (F	e (F7) 8)	present, unless disturb	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallon Other (Expl.	inese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick Da Sandy N Sandy C Sandy F Strippe Dark Su licators	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b>	rk Surfac essions (F	e (F7) 8)	oresent, unless disturb	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallon Other (Expl.	inese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick Da Sandy N Sandy C Sandy F Strippe Dark Su licators	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b>	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick Da Sandy N Sandy C Sandy F Strippe Dark Su icators	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b>	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>	resent, unless disturb <b>lydric Soil Present?</b>	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	inese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da andy N Sandy C Sandy F Stripped Dark Su Cators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b>	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B</b> ) ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da andy N Sandy C Sandy F Strippe Dark Su Cators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da Gandy N Gandy F Gandy F Stripped Dark Su Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da Gandy N Gandy F Gandy F Stripped Dark Su Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da Gandy N Gandy F Gandy F Stripped Dark Su Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da andy M andy C andy F tripped Dark Su cators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B</b> ) ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da andy N Sandy C Sandy F Strippe Dark Su Cators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da Gandy N Gandy F Gandy F Stripped Dark Su Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B</b> ) ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da Gandy N Gandy F Gandy F Stripped Dark Su Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick Da Gandy N Gandy C Gandy F Stripped Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da Gandy N Gandy F Gandy F Stripped Dark Su Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da andy N Sandy C Sandy F Strippe Dark Su Cators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da andy N Sandy C Sandy F Strippe Dark Su Cators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
hick Da Gandy N Gandy F Gandy F Stripped Dark Su Dark Su icators rictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick D Sandy N Sandy C Sandy F Stripped Dark Su licators trictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick D Sandy N Sandy C Sandy F Stripped Dark Su licators trictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick Da Sandy N Sandy C Sandy F Strippe Dark Su licators	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick D Sandy N Sandy C Sandy F Stripped Dark Su licators trictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)
Thick D Sandy N Sandy C Sandy F Stripped Dark Su licators trictive	ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type:	ILRA 149	Depleted Dar Redox Depre 9 <b>B)</b> and wetland hydr	rk Surfac essions (F	e (F7) <sup>:8</sup> ) <u>ust be p</u>		Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallor Other (Expl. ped or problematic	nese Masses (F12) <b>(LRR K, L, R)</b> loodplain Soils (F19) <b>(MLRA 149B)</b> ic (TA6) <b>(MLRA 144A, 145, 149B)</b> Material (F21) w Dark Surface (TF12) ain in Remarks)

#### Soil Photos



Photo of Sample Plot East



Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek So	olar Project	City/County:	Sprakers, Montg	omery County		Sampling Date: 2	021-Aug-27		
Applicant/Owner: SunE	East			State: NY		Sampling Point: W-I	NSD-05_UPL-3		
Investigator(s): Nick DeJohn, Brian Corrigan Section, Township, Range: NA									
Landform (hillslope, terrad	ce, etc.):	Flat	Local relief	(concave, convex,	none):	None	Slope (%): 0 to 1		
Subregion (LRR or MLRA):	LRR L		Lat:	42.86506732	Long:	-74.4848000911	Datum: WGS84		
Soil Map Unit Name:	lion silt loam	n, 0 to 3 percent slopes				NWI classificati	ion:		
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🗸 No (If no, explain in Remarks.)									
0		or Hydrology significant or Hydrology naturally	5			ances" present? / answers in Remark	Yes 🟒 No (s.)		

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL.			

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)			
		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes No 🟒
Saturation Present?	Yes No 🟒	Depth (inches):		
(includes capillary fringe)				
Describe Recorded Data (stream ga	auge, monitoring well, a	erial photos, previous inspections), if	available:	
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-05\_UPL-3

ree Stratum (Plot size: 30 ft )	Absolute	Dominant	Indicator	Dominance Test worksheet:		
r <u>ee Stratum</u> (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species	<sup>That</sup> 0	(A)
				Are OBL, FACW, or FAC:		
				Total Number of Dominant Spe Across All Strata:	ties 1	(B)
				<ul> <li>Percent of Dominant Species T</li> </ul>		
				- Are OBL, FACW, or FAC:	0	(A/B)
				Prevalence Index worksheet:		
				- <u>Total % Cover of:</u>	Multiply	BV:
				- OBL species 0	x 1 =	 0
	0	= Total Cov	er	FACW species 15	x 2 =	30
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x 3 =	0
				- FACU species 75	x 4 =	300
				- UPL species 15	x 5 =	75
				- Column Totals 105	(A)	405 (B)
				- Prevalence Index = B		405 (B
				- Hydrophytic Vegetation Indicat		·
				- 1- Rapid Test for Hydroph		0
				2 - Dominance Test is > 50		1
	0	= Total Cov	er	3 - Prevalence Index is < 3		
<u>erb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adapta		sunnortin
. Solidago canadensis	60	Yes	FACU	<ul> <li>data in Remarks or on a separa</li> </ul>		supportin
Phalaris arundinacea	15	No	FACW	Problematic Hydrophytic		xplain)
Asclepias syriaca	10	No	UPL	<sup>1</sup> Indicators of hydric soil and w	0	
Lotus tenuis	10	No	FACU	present, unless disturbed or pr	-	0)
. Daucus carota	5	No	UPL	Definitions of Vegetation Strata	:	
. Lonicera morrowii	5	No	FACU	Tree – Woody plants 3 in. (7.6 c		diameter a
				breast height (DBH), regardless	of height.	
				Sapling/shrub – Woody plants	ess than 3 in.	DBH and
				greater than or equal to 3.28 ft		
0.				Herb – All herbaceous (non-wo		gardless o
1				size, and woody plants less tha		
2.				Woody vines – All woody vines	greater than 3	3.28 ft in
	105	= Total Cov	er	height.		
<u>Voody Vine Stratum (</u> Plot size: <u>30 ft</u> )		-		Hydrophytic Vegetation Prese	nt? Yes	No 🟒
				=		
				-		
	0	= Total Cov	er	-		

Depth	Matrix		Redux	reat	ures				
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 7	10YR 3/3	100					Loam		
				·					
				·					
	-			·					
/pe: C = (	Concentration, D = I	Depletic	n, RM = Reduced	Mat	rix, MS =	Masked Sa	and Grains. <sup>2</sup> Lo	ocation: PL = F	Pore Lining, M = Matrix.
•	Indicators:				,				r Problematic Hydric Soils <sup>3</sup> :
Histoso			Polyvalue Be	ow S	urface (S	8) (LRR R, I	MLRA 149B)		ck (A10) <b>(LRR K, L, MLRA 149B)</b>
-	pipedon (A2)		Thin Dark Su						airie Redox (A16) <b>(LRR K, L, R)</b>
	istic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L)			cky Peat or Peat (S3) <b>(LRR K, L, R)</b>
Hydrog	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)				face (S7) <b>(LRR K, L)</b>
	ed Layers (A5)		Depleted Ma						e Below Surface (S8) <b>(LRR K, L)</b>
	d Below Dark Surfa	ice (A11						-	k Surface (S9) <b>(LRR K, L)</b>
_ Thick D				'k Sui	face (F7)				nganese Masses (F12) (LRR K, L, R)
c	ark Surface (A12)		Depleted Dar						1ga11ese 1viasses (F12) (LKK K, L, K)
	/lucky Mineral (S1)		Redox Depre						-
_Sandy (	Mucky Mineral (S1) Gleyed Matrix (S4)							Piedmon	odic (TA6) (MLRA 144A, 145, 149B)
_ Sandy C _ Sandy F	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5)							Piedmon Mesic Sp	t Floodplain Soils (F19) <b>(MLRA 149B)</b>
_ Sandy ( _ Sandy F _ Strippe	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6)		Redox Depre					Piedmon Mesic Sp Red Pare	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b>
_ Sandy ( _ Sandy F _ Strippe	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5)	ILRA 14	Redox Depre					Piedmon Mesic Sp Red Pare Very Sha	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21)
_ Sandy ( _ Sandy F _ Strippe _ Dark Su	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b>		Redox Depre	ssior	ıs (F8)		unless disturbe	Piedmon Mesic Sp Red Pare Very Sha Other (Ex	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks)
_ Sandy ( _ Sandy F _ Strippe _ Dark Su	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) <b>(LRR R, M</b> of hydrophytic veg		Redox Depre	ssior	ıs (F8)		unless disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (Ex	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks)
_ Sandy ( _ Sandy F _ Strippe _ Dark Su	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic vege <b>Layer (if observed):</b>		Redox Depre 9 <b>B)</b> and wetland hydr	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy ( _ Sandy F _ Strippe _ Dark Su dicators	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type:		Redox Depre	ssior	ıs (F8)	e present,	unless disturbed il Present?	Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks)
Sandy C Sandy F Strippe Dark Su dicators	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic vege <b>Layer (if observed):</b>		Redox Depre 9 <b>B)</b> and wetland hydr	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Strippe _ Dark SL dicators strictive marks:	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> <u>of hydrophytic veg</u> <b>Layer (if observed):</b> Type:	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Strippe _ Dark SL dicators strictive marks:	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive marks:	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Strippe _ Dark SL dicators strictive marks:	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Stripper _ Dark Su ndicators estrictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Stripper _ Dark Su ndicators estrictive emarks:	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Stripper _ Dark Su ndicators estrictive emarks:	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Stripper _ Dark Su ndicators estrictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
_ Sandy C _ Sandy F _ Stripper _ Dark Su dicators estrictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) kplain in Remarks) atic.
Sandy C Sandy F Strippe Dark Su dicators strictive	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR R, M</b> of hydrophytic veg <b>Layer (if observed):</b> Type: Depth (inches):	etation a	Redox Depre 9 <b>B)</b> and wetland hydr None	ssior	ıs (F8)	e present,		Piedmon Mesic Sp Red Pare Very Sha Other (Ex d or problema	t Floodplain Soils (F19) <b>(MLRA 149B)</b> odic (TA6) <b>(MLRA 144A, 145, 149B)</b> ent Material (F21) llow Dark Surface (TF12) explain in Remarks)

#### Soil Photos



Photo of Sample Plot South



Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creel	k Solar Projec	t	City/County:	Sprakers, Mont	gomery Coun	ty	Sampling Date:	2021-Aug-26
Applicant/Owner: Su	unEast				State: N	Y	Sampling Point:	W-NSD-06_PFO-1
Investigator(s): Nick	DeJohn, Briar	n Corrigan		Sec	tion, Townshij	p, Range: N	A	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	f (concave, cor	nvex, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLR	RA): LRR	L		Lat:	42.86285613	32 Long:	-74.4894221239	Datum: WGS84
Soil Map Unit Name:	Illion silt loa	m, 0 to 3 percen	t slopes				NWI classifie	cation:
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒 N	lo (If no	, explain in Rema	rks.)
<b>u</b>	Soil, Soil,	or Hydrology or Hydrology	0	tly disturbed? problematic?			tances" present? y answers in Rem	Yes 🟒 No arks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-06
Remarks: (Explain alternative procedur	res here or in a separate repo	ort)	
Covertype is PFO.			

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)		
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Surface</li> </ul>		<ul> <li> Surface Soil Cracks (B6)</li> <li> Drainage Patterns (B10)</li> <li> Moss Trim Lines (B16)</li> <li> Dry-Season Water Table (C2)</li> <li> Crayfish Burrows (C8)</li> <li> Saturation Visible on Aerial Imagery (C9)</li> <li> Stunted or Stressed Plants (D1)</li> <li> Geomorphic Position (D2)</li> <li> Shallow Aquitard (D3)</li> <li> Microtopographic Relief (D4)</li> <li> FAC-Neutral Test (D5)</li> </ul>	
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	
(includes capillary fringe)			
Describe Recorded Data (stream ga	auge, monitoring well, ae	erial photos, previous inspections), if	available:
Refficience.			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-06\_PFO-1

60	= Total Cov Yes Yes	Status FACW er FAC FAC FACU	Number of Dominant Species The         Are OBL, FACW, or FAC:         Total Number of Dominant Species         Across All Strata:         Percent of Dominant Species The         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         OBL species       15         FACW species       125         FAC species       15         FACU species       20         UPL species       0	$ \begin{array}{r}       4 \\       es \\       5 \\       xt \\       80 \\       \hline       X1 = \\       x2 = \\       x3 = \\       x4 = \\   \end{array} $	
60 15 10	= Total Cov Yes Yes	er FAC	Total Number of Dominant Species         Across All Strata:         Percent of Dominant Species That         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         Total % Cover of:         OBL species       15         FACW species       125         FAC species       15         FACU species       20	$ \begin{array}{r}       5 \\       \hline                      $	(A/B) (A
60 15 10	= Total Cov Yes Yes	FAC	Across All Strata:         Percent of Dominant Species That         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         OBL species       15         FACW species       125         FAC species       15         FACU species       20	$ \begin{array}{r}       5 \\       \hline                      $	(A/B) (A
60 15 10	= Total Cov Yes Yes	FAC	Percent of Dominant Species That         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         Total % Cover of:         OBL species       15         FACW species       125         FAC species       15         FACU species       20	Multiply 	✓ By: 15 250 45
60 15 10	= Total Cov Yes Yes	FAC	Are OBL, FACW, or FAC: Prevalence Index worksheet: OBL species 15 FACW species 125 FAC species 15 FACU species 20	Multiply 	✓ By: 15 250 45
60 15 10	= Total Cov Yes Yes	FAC	Total % Cover of:       OBL species     15       FACW species     125       FAC species     15       FACU species     20	x 1 = x 2 = x 3 = x 4 =	15 250 45
60 15 10	= Total Cov Yes Yes	FAC	OBL species     15       FACW species     125       FAC species     15       FACU species     20	x 1 = x 2 = x 3 = x 4 =	15 250 45
15 10	Yes Yes	FAC	FACW species125FAC species15FACU species20	x 2 = x 3 = x 4 =	250 45
15 10	Yes Yes	FAC	FAC species15FACU species20	x 3 = x 4 =	45
10	Yes		FACU species 20	x 4 =	
10	Yes				80
		FACU	- UPL species 0		
				x 5 =	0
			- Column Totals 175	(A)	390 (B)
	·		Prevalence Index = B/A	=	<u> </u>
	·		Hydrophytic Vegetation Indicator	's:	
	·		1- Rapid Test for Hydrophyt	ic Vegetatio	n
25	= Total Cov	or	2 - Dominance Test is >50%		
25		CI	$\underline{\checkmark}$ 3 - Prevalence Index is $\leq$ 3.	) <sup>1</sup>	
40	Yes	FACW	. – .		supportin
-				-	•
	•		,	5	ogy must b
		inco	· · · · ·	Jematic	
	<u> </u>		•	) or more in	diamotor
	<u> </u>			-	ulametera
				-	DBH and
	<u> </u>				
	·				egardless o
	·		size, and woody plants less than	3.28 ft tall.	
	·		Woody vines – All woody vines g	eater than 3	3.28 ft in
90	= Total Cov	er	height.		
			Hydrophytic Vegetation Present	?Yes 🧹	No
			-		
			-		
			-		
0	= Total Cov	er	-		
	90	25         Yes           15         No           10         Total Cov           0         = Total Cov	25         Yes         FACW           15         No         OBL           10         No         FACU	40       Yes       FACW         25       Yes       FACW         15       No       OBL         10       No       FACU         11       Definitions of Vegetation Strata:         Tree - Woody plants 3 in. (7.6 cm         breast height (DBH), regardless of         Sapling/shrub - Woody plants less         greater than or equal to 3.28 ft (1         Herb - All herbaceous (non-wood size, and woody plants less than         Woody vines - All woody vines gr         height.         90       = Total Cover         0       = Total Cover	25       Yes       FACW         15       No       OBL         10       No       FACU         11       Indicators of hydric soil and wetland hydrologitation of the problematic         10       No       FACU         10       No       FACU         10       No       FACU         10       Remarks or on a separate sheet)       Indicators of hydric soil and wetland hydrologitation problematic         10       Problematic Hydrophytic Vegetation Strata:       Tree - Woody plants 3 in. (7.6 cm) or more in breast height (DBH), regardless of height.         11       Sapling/shrub - Woody plants less than 3.28 ft tall.       Woody vines - All woody vines greater than 3 in.         10       Total Cover       Hydrophytic Vegetation Present? Yes

Profile Desc	ription: (Describe to	o the d	lepth needed to c	locun	nent the	indicato	r or confirm the a	bsence of	indicators.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	<b>:</b>	Remarks
0 - 20	10YR 3/1	95	5YR 4/6	5	С	М	Clay Loar	m	
		—							
<sup>1</sup> Type: C = C	oncentration, D = D	) epleti	on. RM = Reduced	d Mat	rix. MS =	Masked	Sand Grains. <sup>2</sup> L	ocation: P	PL = Pore Lining, M = Matrix.
Hydric Soil					,				ors for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	elow S	Surface (S	58) <b>(LRR</b>	R, MLRA 149B)	2 cm	n Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
Histic Ep	pipedon (A2)		Thin Dark Su						st Prairie Redox (A16) <b>(LRR K, L, R)</b>
Black Hi	stic (A3)		Loamy Muck	y Mir	neral (F1)	(LRR K,	L)		n Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b>
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)				< Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted Ma	atrix (	F3)				value Below Surface (S8) <b>(LRR K, L)</b>
Deplete	d Below Dark Surfa	ce (A1´	I)_✓ Redox Dark	Surfa	ce (F6)				Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da			)			-Manganese Masses (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)		Redox Depre	essior	רs (F8)				Imont Floodplain Soils (F12) (LKK K, L, K)
Sandy G	ileyed Matrix (S4)								• • • • • • • • • • • • • • • • • • • •
Sandy R	edox (S5)								ic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
Stripped	l Matrix (S6)								Parent Material (F21)
	rface (S7) <b>(LRR R, M</b>	LRA 14	9B)						/ Shallow Dark Surface (TF12)
									er (Explain in Remarks)
-	of hydrophytic vege	etation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	ed or prob	lematic.
Restrictive	ayer (if observed):								
	Туре:		None	-		Hydric	Soil Present?		Yes 🯒 No
	Depth (inches):								
Remarks:									
1									
1									
l									

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-26
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-06_UPL-1
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Range	NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, nor	e): Undulating Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8629413341 Lo	ng: -74.4889876899 Datum: WGS84
Soil Map Unit Name:Illion silt loam, 0 to 3 perce	nt slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	Il for this time of year? Yes 🟒 No (	f no, explain in Remarks.)
		mstances" present? Yes 🟒 No any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL.			

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)			
		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes No 🟒
Saturation Present?	Yes No 🟒	Depth (inches):		
(includes capillary fringe)				
Describe Recorded Data (stream ga	auge, monitoring well, a	erial photos, previous inspections), if	available:	
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-06\_UPL-1

<u>Free Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
. Fraxinus nigra	40	Yes	FACW	Total Number of Dominant Species		
<i>Prunus serotina</i>	20	Yes	FACU	Across All Strata:	6	(B)
				Percent of Dominant Species That	50	(A/B)
				Are OBL, FACW, or FAC:		
				Prevalence Index worksheet:		
·		· ·		Total % Cover of:	Multiply	-
	60	= Total Cov	er	OBL species 0	x 1 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		-		FACW species 55	x 2 =	110
Rhamnus cathartica	15	Yes	FAC	FAC species 15	x 3 =	45
	5	Yes		FACU species 90	x 4 =	360
. Fraxinus nigra		res	FACW	UPL species 0	x 5 =	0
	<u></u>	·		- Column Totals 160	(A)	515 (B
		·		Prevalence Index = B/A =	3.2	
				Hydrophytic Vegetation Indicators	:	
		·		1- Rapid Test for Hydrophytic	Vegetation	
	20	= Total Cov	er	2 - Dominance Test is > 50%		
<u>erb Stratum (</u> Plot size: <u>5 ft</u> )		-	ci	$3$ - Prevalence Index is $\leq 3.0^{1}$		
Parthenocissus quinquefolia	50	Yes	FACU	4 - Morphological Adaptation		supportin
Rubus allegheniensis	20	Yes	FACU	data in Remarks or on a separate s	-	
	10	No	FACW	- Problematic Hydrophytic Veg	-	
. Impatiens capensis	10	INU	FACVV	<ul> <li><sup>1</sup>Indicators of hydric soil and wetla</li> <li>present, unless disturbed or probl</li> </ul>	, ,	gy must b
		<u> </u>			ematic	
		·		Definitions of Vegetation Strata:		
·		·		Tree – Woody plants 3 in. (7.6 cm) breast height (DBH), regardless of		lameter a
		<u> </u>		Sapling/shrub – Woody plants less	-	NBH and
		·		greater than or equal to 3.28 ft (1 r		Diranu
		·		Herb – All herbaceous (non-woody		ardless o
0		<u> </u>		size, and woody plants less than 3.		Sal aless o
1	<u></u>	·		Woody vines – All woody vines gre		28 ft in
2				height.		
	80	= Total Cov	er	Hydrophytic Vegetation Present?	Yes N	lo ./
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u> )						
				-		
		·		-		
		·		-		
·		·		-		
	0	= Total Cov	er			

rofile Desc Depth	Matrix		Redox	: Feat	ures				
inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 8	10YR 3/2	100					Silt Loam		
8 - 20	10YR 4/2	100					Silt Loam		
		· ·							
		·			<u> </u>				
		· ·							
		·							
		·			. <u> </u>				
		·							
		<u> </u>	- DM Deduced				and Casimon 21		and the term NA - NA - term
<i>,</i> ,	Concentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked S	and Grains. <sup>2</sup> Lo		ore Lining, M = Matrix.
	ndicators:					0.4555		Indicators for	Problematic Hydric Soils <sup>3</sup> :
_ Histosol			Polyvalue Bel					2 cm Muc	k (A10) <b>(LRR K, L, MLRA 149B)</b>
Black Hi	oipedon (A2)		Thin Dark Su				149B)	Coast Prai	rie Redox (A16) <b>(LRR K, L, R)</b>
-	en Sulfide (A4)		Loamy Mucky Loamy Gleye			(LKK K, L)			ky Peat or Peat (S3) <b>(LRR K, L, R)</b>
	d Layers (A5)		Depleted Ma						ace (S7) <b>(LRR K, L)</b>
	d Below Dark Surfa								Below Surface (S8) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Dar						Surface (S9) <b>(LRR K, L)</b>
			Depicted Dai					Iron-Mang	anese Masses (F12) <b>(LRR K, L, R)</b>
			Redox Depre	ssior	is (F8)				
_ Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ns (F8)			Piedmont	Floodplain Soils (F19) <b>(MLRA 149B)</b>
_ Sandy N _ Sandy G	lucky Mineral (S1) ileyed Matrix (S4)		Redox Depre	ssior	ıs (F8)			Piedmont Mesic Spo	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b>
_ Sandy M _ Sandy G _ Sandy R	lucky Mineral (S1) ileyed Matrix (S4) edox (S5)		Redox Depre	ssior	ıs (F8)			Piedmont Mesic Spo Red Parer	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21)
_ Sandy N _ Sandy G _ Sandy R _ Stripped	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6)	/I RA 149		ssior	ıs (F8)			Piedmont Mesic Spo Red Parer Very Shall	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12)
_ Sandy N _ Sandy G _ Sandy R _ Strippec	lucky Mineral (S1) ileyed Matrix (S4) edox (S5)	1LRA 149		ssior	ns (F8)			Piedmont Mesic Spo Red Parer Very Shall	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21)
_ Sandy M _ Sandy G _ Sandy R _ Strippec _ Dark Su	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6)		98)			e present,	unless disturbe	Piedmont Mesic Spo Red Parer Very Shall Other (Exp	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks)
_ Sandy W _ Sandy G _ Sandy R _ Strippec _ Dark Su	lucky Mineral (S1) ileyed Matrix (S4) iedox (S5) I Matrix (S6) rface (S7) <b>(LRR R, N</b>	etation a	98)			e present,	unless disturbe	Piedmont Mesic Spo Red Parer Very Shall Other (Exp	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks)
_ Sandy M _ Sandy G _ Sandy R _ Strippec _ Dark Sun ndicators o estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg	etation a	98)				unless disturbe bil Present?	Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks)
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Su ndicators o estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>ayer (if observed)</b> :	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sun ndicators d estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sun ndicators d estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sun ndicators d estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sun ndicators of estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) blain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Strippec _ Dark Su dicators o strictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Strippec _ Dark Su dicators o strictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) blain in Remarks) ic.
Sandy M Sandy G Sandy R Strippec Dark Su dicators c	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) blain in Remarks) ic.
Sandy M Sandy G Sandy R Strippec Dark Su dicators c	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
Sandy M Sandy G Sandy R Strippec Dark Su dicators c	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
Sandy M Sandy G Sandy R Strippec Dark Su dicators c	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Strippec _ Dark Su dicators o strictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) blain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Strippec _ Dark Su dicators o strictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) blain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Strippec _ Dark Su dicators o strictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) blain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sun ndicators d estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Su ndicators o estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Su ndicators d estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sun ndicators d estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) blain in Remarks) ic.
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sun ndicators d estrictive L	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.
Sandy M Sandy G Sandy R Strippec Dark Su dicators c	lucky Mineral (S1) ileyed Matrix (S4) edox (S5) d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg <b>.ayer (if observed):</b> Type:	etation a	9 <b>B)</b> and wetland hydr					Piedmont Mesic Spo Red Parer Very Shall Other (Exp d or problemat	Floodplain Soils (F19) <b>(MLRA 149B)</b> dic (TA6) <b>(MLRA 144A, 145, 149B)</b> it Material (F21) ow Dark Surface (TF12) olain in Remarks) ic.

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-A	Nug-26
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-0	)7_PUB-1
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Ra	nge:_NA	
Landform (hillslope, terrace, etc.): Depressi	on Local relief (concave, convex,	none): Concave Sl	lope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.863525888	Long: -74.4895901811 Da	tum: WGS84
Soil Map Unit Name: Water		NWI classification:	
Are climatic/hydrologic conditions on the site typ	ical for this time of year? Yes _∠_ No	(If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal C	ircumstances" present? Yes	_✔_ No
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (If needed, ex	olain any answers in Remarks.)	

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🖌 No	Is the Sampled Area within a Wetland?	Yes 🧹 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-07
Remarks: (Explain alternative procedures h	ere or in a separate report	;)	
Covertype is PUB.			

#### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	<u>ie is required; check all th</u>	nat apply)		Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Su</li> </ul>	Aquatic Marl De Hydroge Oxidized Presenc Recent I Thin Mu agery (B7) Other (E	itained Leaves (B9) Fauna (B13) eposits (B15) en Sulfide Odor (C1) d Rhizospheres on Living R er of Reduced Iron (C4) Iron Reduction in Tilled Soi uck Surface (C7) Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:				
Surface Water Present?	Yes 🟒 No	Depth (inches):	48	_
Water Table Present?	Yes 🟒 No	Depth (inches):	0	Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	_
(includes capillary fringe)				
Describe Recorded Data (stream g	auge, monitoring well, ae	rial photos, previous inspe	ctions), if	available:
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-07\_PUB-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
				Total Number of Dominant Species	<sup>5</sup> 1	(B)
8				<ul> <li>Percent of Dominant Species That</li> <li>Are OBL, FACW, or FAC:</li> </ul>	100	(A/B)
				Prevalence Index worksheet:		
				- Total % Cover of:	Multiply B	r
7				- OBL species 5	x 1 =	5
	0	= Total Cov	er	FACW species 0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x 3 =	0
				- FACU species 0	x 4 =	0
2				- UPL species 0	x5=	0
3.						-
4.					(A)	5 (B)
5.				Prevalence Index = B/A =		
5.				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic	Vegetation	
	0	= Total Cov	er	2 - Dominance Test is >50%		
<u>-lerb Stratum</u> (Plot size: <u>5 ft</u> )				$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{1}$		
. Typha angustifolia	5	Yes	OBL	4 - Morphological Adaptation		upportin
		103	ODL	- data in Remarks or on a separate s	heet)	
2				<ul> <li>Problematic Hydrophytic Veg</li> </ul>	etation <sup>1</sup> (Exp	lain)
3				- <sup>1</sup> Indicators of hydric soil and wetla		' must b
4				_ present, unless disturbed or proble	ematic	
5				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) o	or more in di	ameter a
7				breast height (DBH), regardless of	height.	
8				Sapling/shrub – Woody plants less		BH and
9.				greater than or equal to 3.28 ft (1 r	n) tall.	
10				Herb – All herbaceous (non-woody		rdless o
11				size, and woody plants less than 3.		
12				Woody vines – All woody vines grea	ater than 3.2	8 ft in
	5	= Total Cov	er	height.		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 No	
1.						
2.				-		
2 3.		·		-		
		·		-		
4				-		
	0	= Total Cov	er			

nches)	Color (moist)	% Color (moist)	<u>%</u> Type <sup>1</sup>	Loc <sup>2</sup> Textu	ure Remarks
-		<u> </u>		·	
		<u> </u>		· ·	
		· ·		·	
		<u> </u>			
				·	
			· ·	·	
				·	
		epletion, RM = Reduce	d Matrix, MS =	- Masked Sand Grains	
	ndicators:				Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol Histic Er	(A1) bipedon (A2)			S8) <b>(LRR R, MLRA 149</b> R R, MLRA 149B)	
	stic (A3)	Loamy Mucl			Coast Prairie Redox (A16) (LRR K, L, R)
	en Sulfide (A4)	Loamy Gleye	-		5 cm Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b> Dark Surface (S7) <b>(LRR K, L)</b>
	d Layers (A5)	Depleted Ma			Polyvalue Below Surface (S8) (LRR K, L)
		e (A11) Redox Dark			Thin Dark Surface (S9) <b>(LRR K, L)</b>
	ark Surface (A12)		irk Surface (F7	")	Iron-Manganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)	Redox Depr	essions (F8)		Piedmont Floodplain Soils (F19) (MLRA 149B)
-	ileyed Matrix (S4) edox (S5)				Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b>
-	Matrix (S6)				Red Parent Material (F21)
	rface (S7) <b>(LRR R, ML</b>	RA 149B)			Very Shallow Dark Surface (TF12) ⁄_ Other (Explain in Remarks)
licators	of hydrophytic yeget	ation and wetland by	Irology must k	ne present unless dis	sturbed or problematic.
	ayer (if observed):		inology must i		
	Type:	None		Hydric Soil Present	? Yes 🖌 No
	Depth (inches):		-	5	
narks:	i			·	
to inun	dation a clear soil p	ofile was unobtainabl	e. Soils are as	sumed to be hydric.	

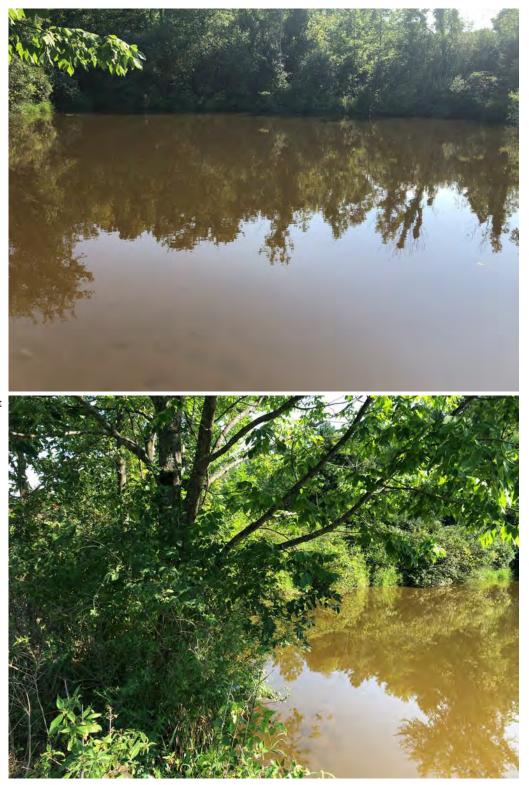


Photo of Sample Plot East Photo of Sample Plot South



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creel	k Solar Project	City/Count	t <b>y:</b> Sprakers, Montg	gomery County		Sampling Date: 2	021-Aug-26
Applicant/Owner: Su	unEast			State: NY	9	Sampling Point: W-	NSD-07_UPL-1
Investigator(s): Nick	DeJohn, Brian	Corrigan	Sect	ion, Township, Ra	nge: NA	L	
Landform (hillslope, ter	rrace, etc.):	Flat	Local relief	(concave, convex,	none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLR	A): LRR L		Lat:	42.8634700645	Long:	-74.4893521351	Datum: WGS84
Soil Map Unit Name:	Water					NWI classificat	ion:
Are climatic/hydrologic	conditions on	the site typical for this tin	ne of year?	Yes 🟒 No 🔄	(lf no,	explain in Remarks	5.)
Are Vegetation,	Soil,	or Hydrology significa	antly disturbed?	Are "Normal C	Circumsta	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology natural	ly problematic?	(If needed, exp	plain any	answers in Remark	<s.)< td=""></s.)<>

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures	here or in a separate report	;)	
Covertype is UPL.			

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	e is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two	required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Surface</li> </ul>	Aquat Marl I Hydro Oxidiz Prese Recen Thin M agery (B7) Other	r-Stained Leaves (B9) cic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) zed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C6) Muck Surface (C7) • (Explain in Remarks)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>	ı (C9)
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):	_	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes	No _
Saturation Present?	Yes No 🟒	Depth (inches):	_	
(includes capillary fringe)				
	auge, monitoring well, a	aerial photos, previous inspections), if	available:	
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-07\_UPL-1

Tree Stratum (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	. 0	(4)
. Fraxinus americana	15	Yes	FACU	Are OBL, FACW, or FAC:		(A)
				Total Number of Dominant Species Across All Strata:	5 2	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)
				Prevalence Index worksheet:		
		·		Total % Cover of:	Multiply	Bv:
				OBL species 0	x 1 =	0
	15	= Total Cov	er	FACW species 0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x 3 =	0
. <u>Tilia americana</u>	3	No	FACU	FACU species 18	x 4 =	72
·				UPL species 40	x 5 =	200
k					(A)	272 (B)
j.				Prevalence Index = B/A =		
j.				Hydrophytic Vegetation Indicators		
· · · · · · · · · · · · · · · · · · ·				1- Rapid Test for Hydrophytic	Vegetation	ı
·	3	= Total Cov	er	2 - Dominance Test is > 50%		
lerb Stratum (Plot size: <u>5 ft</u> )		-		$\_$ 3 - Prevalence Index is $\le 3.0^{1}$		
	40	Yes	UPL	4 - Morphological Adaptation	s¹ (Provide	supporting
. Zea mays				data in Remarks or on a separate s	sheet)	
				Problematic Hydrophytic Veg	etation <sup>1</sup> (E	kplain)
3				<sup>1</sup> Indicators of hydric soil and wetla	nd hydrolo	gy must be
l				present, unless disturbed or probl	ematic	
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm)	or more in	diameter a
7				breast height (DBH), regardless of	height.	
3				Sapling/shrub – Woody plants less	than 3 in. I	DBH and
).				greater than or equal to 3.28 ft (1 r	n) tall.	
0		· · ·		Herb – All herbaceous (non-woody	) plants, re	gardless of
11				size, and woody plants less than 3.	28 ft tall.	
				Woody vines – All woody vines gre	ater than 3	.28 ft in
2	40	= Total Cov	or	height.		
<u>Noody Vine Stratum (Plot size:30 ft)</u>		-		Hydrophytic Vegetation Present?	Yes I	No 🟒
		<u> </u>		•		
ł						
	0	= Total Cov	er			

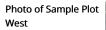
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 9	7.5YR 3/2	100				Silty	/ Clay Loam	
9 - 18	7.5YR 3/2	95	10YR 4/6	5	C	<u>M</u> <u>C</u>	lay Loam	
				·				
				·				
				·				
		Depletio	n, RM = Reduced	Mat	rix, MS =	Masked Sand Grains.	<sup>2</sup> Location: PL = Por	*
<b>lric Soil In</b> Histosol (	ndicators:					8) (LRR R, MLRA 149E		Problematic Hydric Soils <sup>3</sup> :
Stratified Depleted Thick Dar Sandy Mu Sandy Glo Sandy Re	n Sulfide (A4) Layers (A5) Below Dark Surfa k Surface (A12) ucky Mineral (S1) eyed Matrix (S4)	ice (A11)	Depleted Dar Redox Depre	d Ma trix (l iurfa k Su	trix (F2) F3) ce (F6) rface (F7)		Dark Surfac Polyvalue B Thin Dark S Iron-Manga Piedmont F Mesic Spod Red Parent Very Shalloo	w Dark Surface (TF12)
	face (S7) <b>(LRR R, M</b>	ILRA 149	9B)				Other (Expl	ain in Remarks)
_ Dark Surf	face (S7) <b>(LRR R, M</b>			olog	y must be	e present, unless dist		ain in Remarks)
_ Dark Surf	face (S7) <b>(LRR R, M</b>	etation a		olog	y must be	e present, unless dist	urbed or problematic	
_ Dark Surf	face (S7) <b>(LRR R, M</b> f hydrophytic vege	etation a		olog	y must be	e present, unless dist	urbed or problematic	
_ Dark Surf dicators o strictive La T	face (S7) <b>(LRR R, M</b> f hydrophytic vega <b>ayer (if observed):</b>	etation a	and wetland hydr	olog	y must be		urbed or problematic	

#### Soil Photos



Photo of Sample Plot East







# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery County	Sampling Date: 2021-Aug-27					
Applicant/Owner: SunEast	State: NY	Sampling Point: W-NSD-08_PUB-1					
Investigator(s): Nick DeJohn, Brian Corrigan	Section, Township, Ra	nge: NA					
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex,	none):         Concave         Slope (%):         0 to 1					
Subregion (LRR or MLRA): LRR L	Lat: 42.8640522715	Long: -74.4817194064 Datum: WGS84					
Soil Map Unit Name: Illion silt loam, 0 to 3 percent	t slopes	NWI classification:					
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)							
Are Vegetation,       Soil,       or Hydrology _         Are Vegetation,       Soil,       or Hydrology _	0	Circumstances" present? Yes _✔ No plain any answers in Remarks.)					

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-08
Remarks: (Explain alternative procedur	res here or in a separate re	port)	
Covertype is PUB.			

## HYDROLOGY

Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)            ✓ Surface Water (A1)           Water-Stained Leaves (B9)             ✓ High Water Table (A2)           Aquatic Fauna (B13)             ✓ Saturation (A3)        Marl Deposits (B15)             Water Marks (B1)        Hydrogen Sulfide Odor (C1)             Sediment Deposits (B2)        Oxidized Rhizospheres on Living Roots (C3)             Drift Deposits (B3)           Presence of Reduced Iron (C4)             Algal Mat or Crust (B4)           Recent Iron Reduction in Tilled Soils (C6)             Iron Deposits (B5)           Thin Muck Surface (C7)             ✓ Inundation Visible on Aerial Imagery (B7)           Other (Explain in Remarks)             Sparsely Vegetated Concave Surface (B8)           Other (Explain in Remarks)				Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream g	Yes _ ✓_ No Yes _ ✓_ No Yes _ ✓_ No auge, monitoring well, ae	Depth (inches): Depth (inches): Depth (inches): <b>rial photos, previous inspe</b>	60 0 0 ections), if	Wetland Hydrology Present? Yes No
Remarks:				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-08\_PUB-1

=	Cover		Number of Dominant Species That         Are OBL, FACW, or FAC:         Total Number of Dominant Species         Across All Strata:         Percent of Dominant Species That         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         Total % Cover of:         ML         OBL species       70         FACW species       0         FAC species       0         AC species       0         VPL species       0         VPL species       0	2 = 3 = 4 =	(A) (B) (A/B) 70 0 0
 = Tota	l Cover		Total Number of Dominant Species         Across All Strata:         Percent of Dominant Species That         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         Total % Cover of:       ML         OBL species       70       x1         FACW species       0       x2         FAC species       0       x2         FACU species       0       x2	100 <u>ultiply By:</u> 1 = 2 = 3 = 4 =	(A/B) 70 0 0
= Tota			Percent of Dominant Species That         Are OBL, FACW, or FAC:         Prevalence Index worksheet:         Total % Cover of:       ML         OBL species       70       x 1         FACW species       0       x 2         FAC species       0       x 2         FACU species       0       x 2	1 = 1 = 2 = 3 = 4 =	70 0 0
= Tota			Prevalence Index worksheet:         Total % Cover of:       ML         OBL species       70       x1         FACW species       0       x2         FAC species       0       x3         FACU species       0       x4         FACU species       0       x4	1 = 2 = 3 = 4 =	70 0 0
= Tota			Total % Cover of:MLOBL species70x1FACW species0x2FAC species0x2FACU species0x2FACU species0x2	1 = 2 = 3 = 4 =	0 0
= Tota			OBL species70x 1FACW species0x 2FAC species0x 3FACU species0x 4	1 = 2 = 3 = 4 =	0 0
			FACW species0x 2FAC species0x 2FACU species0x 2	2 = 3 = 4 =	0 0
			FAC species0x 3FACU species0x 4	3 =	0
			FACU species 0 x 4	1 =	-
			· · ·		
			UPL species 0 x 5		0
					0
			Column Totals 70 (A	A) _ 7	0 (B)
			Prevalence Index = B/A =1		
			Hydrophytic Vegetation Indicators:		
			1- Rapid Test for Hydrophytic Vege	tation	
			2 - Dominance Test is >50%		
= Tota	l Cover		$\checkmark$ 3 - Prevalence Index is $\leq 3.0^1$		
			4 - Morphological Adaptations <sup>1</sup> (Pr	ovide sup	portin
Yes	<u> </u>	OBL			p 0
					in)
					1050 5
			·		
_			_	vro in diar	notor -
					and
					unu
					lless of
				-	1035 0
					ft in
				1011 5.20	C III
= Tota	l Cover				
			Hydrophytic Vegetation Present? Yes_	N0	
= Tota	l Cover				
		= Total Cover		Yes       OBL         data in Remarks or on a separate sheet;         Problematic Hydrophytic Vegetatio         'Indicators of hydric soil and wetland hy         present, unless disturbed or problemati         Definitions of Vegetation Strata:         Tree - Woody plants 3 in. (7.6 cm) or mo         breast height (DBH), regardless of heigh         Sapling/shrub - Woody plants less than         greater than or equal to 3.28 ft (1 m) tal         Herb - All herbaceous (non-woody) plant         size, and woody plants less than 3.28 ft         Woody vines - All woody vines greater theight.         = Total Cover         = Total Cover	Yes       OBL         data in Remarks or on a separate sheet)

SOIL

	% Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup> Texture	Remarks
	·			
	·			
	·			
	·			
	·			
	Depletion, RM = Reduced	Matrix, MS =	Masked Sand Grains.	<sup>2</sup> Location: PL = Pore Lining, M = Matrix.
<b>ric Soil Indicators:</b> Histosol (A1)	Polyvalue Be	low Surface (S	8) (LRR R, MLRA 149B)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Thin Dark Su Loamy Muck Loamy Gleye	rface (S9) <b>(LRR</b> y Mineral (F1) d Matrix (F2)	R, MLRA 149B)	2 cm Muck (A10) ( <b>LRR K, L, MLRA 149B)</b> Coast Prairie Redox (A16) ( <b>LRR K, L, R)</b> 5 cm Mucky Peat or Peat (S3) ( <b>LRR K, L, R)</b> Dark Surface (S7) ( <b>LRR K, L)</b>
Stratified Layers (A5) Depleted Below Dark Surfa Fhick Dark Surface (A12)	Depleted Ma ce (A11) Redox Dark 5 Depleted Da	Surface (F6)		Polyvalue Below Surface (S8) <b>(LRR K, L)</b> Thin Dark Surface (S9) <b>(LRR K, L)</b>
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Redox Depre			Iron-Manganese Masses (F12) <b>(LRR K, L, R)</b> Piedmont Floodplain Soils (F19) <b>(MLRA 149B)</b>
Sandy Redox (S5) Stripped Matrix (S6)				Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b> Red Parent Material (F21)
Dark Surface (S7) <b>(LRR R, M</b>	LRA 149B)			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
licators of hydrophytic vege	tation and wetland hyd	rology must be	e present, unless distur	bed or problematic.
trictive Layer (if observed):				
Туре:	None		Hydric Soil Present?	Yes 🟒 No
Depth (inches):				
e to inundation a clear soil p	profile was unobtainable	e. Soils are assi	umed to be hydric.	

#### Hydrology Photos



Photo of Sample Plot North



Photo of Sample Plot West



# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	city/	/County: Sprakers, M	ontgomery County		Sampling Date:	2021-Aug-27
Applicant/Owner: S	unEast			State: NY		Sampling Point: W	-NSD-08_UPL-1
Investigator(s): Nick	DeJohn, Briar	Corrigan		Section, Township, R	ange: N	A	
Landform (hillslope, te	rrace, etc.):	Hilltop	Local re	elief (concave, conve	k, none):	Convex	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L	I	Lat: 42.8649435612	Long:	-74.4821268507	Datum: WGS84
Soil Map Unit Name:	Illion silt loa	m, 0 to 3 percent slop	pes			NWI classifica	tion:
Are climatic/hydrologic	c conditions o	n the site typical for t	his time of year?	Yes 🟒 No _	(If no	o, explain in Remark	s.)
Are Vegetation, Are Vegetation,		, 0,	ignificantly disturbed aturally problematic?			tances" present? y answers in Remar	Yes 🟒 No ˈks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:	W-NSD-08
Remarks: (Explain alternative procedure	es here or in a separate repo	prt)	
Covertype is UPL.			

## HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)				
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Surface</li> </ul>	.1)      Water-Stained Leaves (B9)         2 (A2)      Aquatic Fauna (B13)        Marl Deposits (B15)      Marl Deposits (B15)         )      Mydrogen Sulfide Odor (C1)         its (B2)      Oxidized Rhizospheres on Living Roots (C3)         3)      Presence of Reduced Iron (C4)         st (B4)      Recent Iron Reduction in Tilled Soils (C6)         5)      Thin Muck Surface (C7)         le on Aerial Imagery (B7)      Other (Explain in Remarks)		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>		
Field Observations:					
Surface Water Present?	Yes No 🟒	Depth (inches):	_		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?   Yes No		
Saturation Present?	Yes No 🟒	Depth (inches):			
(includes capillary fringe)					
	auge, monitoring well, a	erial photos, previous inspections), if	available:		
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-08\_UPL-1

ree Stratum (Plot size: <u>30 ft</u> )	Absolute	Dominant	Indicator	Dominance Test worksh	eet:		
<u>ree stratum</u> (Flot size. <u></u>	% Cover	Species?	Status	Number of Dominant Sp	pecies That	0	(A)
				Are OBL, FACW, or FAC:			
				Total Number of Domin	ant Species	2	(B)
				Across All Strata:			
				Percent of Dominant Sp	ecies That	0	(A/B)
				Are OBL, FACW, or FAC:			
				Prevalence Index works			_
				- <u>Total % Cover c</u>		Multiply	•
	0	= Total Cov	er	– OBL species <u>–</u>	0	x 1 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u> )		_		FACW species	0	x 2 =	0
				FAC species	5	x 3 =	15
				– FACU species	60	x 4 =	240
				– UPL species	28	x 5 =	140
				– Column Totals	93	(A)	395 (B)
·				Prevalence Inc	dex = B/A =	4.2	
		•		- Hydrophytic Vegetation	Indicators:		
		······································		1- Rapid Test for H		egetatior	ı
				2 - Dominance Tes		0	
	0	= Total Cov	er	3 - Prevalence Inde	ex is $\leq 3.0^1$		
<u>erb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological A	Adaptations <sup>1</sup>	(Provide	supportin
Lotus tenuis	60	Yes	FACU	– data in Remarks or on a			
Daucus carota	20	Yes	UPL	Problematic Hydro	phytic Vege	tation <sup>1</sup> (E>	(plain)
Asclepias syriaca	8	No	UPL	<sup>1</sup> Indicators of hydric soil	and wetlan	d hydrolo	gy must b
. Prunella vulgaris	5	No	FAC	present, unless disturbe		-	
				Definitions of Vegetation	n Strata:		
				Tree – Woody plants 3 ir	n. (7.6 cm) or	more in	diameter a
				breast height (DBH), reg	ardless of h	eight.	
				Sapling/shrub - Woody	plants less tl	han 3 in. I	OBH and
				greater than or equal to	3.28 ft (1 m	) tall.	
0.				Herb – All herbaceous (r	non-woody)	plants, re	gardless o
1				size, and woody plants l	ess than 3.2	8 ft tall.	
2.		•		Woody vines - All wood	y vines great	er than 3	.28 ft in
	93	= Total Cov	er	height.			
Voody Vine Stratum (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation	Present?	/es N	No 🖌
		·		-			
				-			
·				-			
·				-			
	0	= Total Cov	er				

SOIL

Depth	cription: (Describe Matrix		•	Features				
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0 - 14	10YR 4/3	100				Silt Loam		
				<u> </u>	<u> </u>			
					. <u> </u>			
	Concentration, D =	Depletic	on, RM = Reduced	l Matrix, MS =	Masked Sand			Lining, M = Matrix.
2	Indicators:						dicators for Pr	oblematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be			-	2 cm Muck (	A10) <b>(LRR K, L, MLRA 149B)</b>
Histic Ep Black Hi	pipedon (A2)		Thin Dark Su Loamy Muck					e Redox (A16) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye					Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Ma					e (S7) <b>(LRR K, L)</b>
	d Below Dark Surfa	ace (A11	•					elow Surface (S8) <b>(LRR K, L)</b>
Thick Da	ark Surface (A12)		Depleted Da	rk Surface (F7	7)			ırface (S9) <b>(LRR K, L)</b> nese Masses (F12) <b>(LRR K, L, R)</b>
Sandy N	lucky Mineral (S1)		Redox Depre	essions (F8)				oodplain Soils (F19) (MLRA 149B)
Sandy G	Gleyed Matrix (S4)							c (TA6) <b>(MLRA 144A, 145, 149B)</b>
Sandy R	edox (S5)							Material (F21)
Sandy R Stripped	d Matrix (S6)						_Red Parent N	Material (F21) / Dark Surface (TF12)
Sandy R Stripped		ILRA 14	9B)				_ Red Parent N _ Very Shallow	
Sandy R Stripped Dark Su	d Matrix (S6)			rology must t	be present, unl		_ Red Parent M _ Very Shallow _ Other (Expla	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su PIndicators	d Matrix (S6) rface (S7) <b>(LRR R, N</b>	etation		rology must b	pe present, unl		_ Red Parent M _ Very Shallow _ Other (Expla	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg	etation		rology must t	be present, unl	  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I	d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> La <b>yer (if observed):</b> Type:	etation	and wetland hydi	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators restrictive I	d Matrix (S6) ırface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> :	etation	and wetland hydi	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> <u>of hydrophytic veg</u> La <b>yer (if observed):</b> Type:	etation	and wetland hydi None	rology must t		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must t		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must t		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must t		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators restrictive I remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su ndicators estrictive I emarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su ndicators estrictive I emarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must t		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su ndicators estrictive I emarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must t		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators restrictive I remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su PIndicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su PIndicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su PIndicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I Remarks:	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must t		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)
Sandy R Stripped Dark Su Indicators Restrictive I	d Matrix (S6) rface (S7) <b>(LRR R, N</b> of hydrophytic veg L <b>ayer (if observed)</b> : Type: Depth (inches):	etation	and wetland hydi None	rology must b		  ess disturbed or	Red Parent N Very Shallow Other (Expla problematic.	/ Dark Surface (TF12) in in Remarks)

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Mont	gomery County	Sampling Date: 202	21-Sept-08		
Applicant/Owner: SunEast		State: NY	Sampling Point: W-NS	SD-09_PEM-1		
Investigator(s): Nick DeJohn, Brian Corrigan Section, Township, Range: NA						
Landform (hillslope, terrace, etc.): Depr	ession Local relief	(concave, convex, no	ne): Concave	Slope (%): 0 to 1		
Subregion (LRR or MLRA): LRR L	Lat:	42.8646947863 L	ong: -74.486457361	Datum: WGS84		
Soil Map Unit Name: Darien silt loam, 3 to	o 8 percent slopes		NWI classification	n:		
Are climatic/hydrologic conditions on the sit	e typical for this time of year?	Yes 🟒 No	(If no, explain in Remarks.)			
· · · · · · · · · · · · · · · · · · ·	rology significantly disturbed? rology naturally problematic?		umstances" present? in any answers in Remarks.	Yes _ 🖌 No )		

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-NSD-09
Remarks: (Explain alternative procedure	es here or in a separate rep	port)	
Covertype is PEM.			

## HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	<u>e is required; check all that</u>	apply)	Secondary Indicators (minimum o	<u>f two required)</u>	
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Ima</li> <li>Sparsely Vegetated Concave Surface</li> </ul>	Aquatic Fa Marl Depo Hydrogen Oxidized R Presence o Recent Iro Thin Muck gery (B7) Other (Exp		<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>✓ Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>✓ Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>✓ FAC-Neutral Test (D5)</li> </ul>		
Field Observations:					
Surface Water Present?	Yes No 🟒	Depth (inches):			
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes 🟒 No	
Saturation Present?	Yes No 🟒	Depth (inches):			
(includes capillary fringe)			_		
Describe Recorded Data (stream ga	uge, monitoring well, aeria	l photos, previous inspections), if	available:		
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-NSD-09\_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Dominant		Dominance Test worksheet:		
I.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
·				Total Number of Dominant Species	2	(B)
				Across All Strata:		(8)
l				<ul> <li>Percent of Dominant Species That</li> <li>Are OBL, FACW, or FAC:</li> </ul>	100	(A/B)
				Prevalence Index worksheet:		
				- <u>Total % Cover of:</u>	Multiply I	Bv:
·				- OBL species 20	x 1 =	20
	0	= Total Cov	ver	FACW species 95	x 2 =	190
apling/Shrub Stratum (Plot size: <u>15 ft</u> )				FAC species 0	x 3 =	0
. Salix alba	10	Yes	FACW	- FACU species 0	x 4 =	0
				- UPL species 0	x 5 =	0
				- Column Totals 115	(A)	210 (B)
l				Prevalence Index = B/A =	1.8	210 (D)
				Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetation	
				- 2 - Dominance Test is >50%	0	
	10	= Total Cov	ver	$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{1}$		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u> )				4 - Morphological Adaptations	<sup>1</sup> (Provide s	supporting
. Phalaris arundinacea	70	Yes	FACW	data in Remarks or on a separate s	neet)	
2. Eupatorium perfoliatum	15	No	FACW	Problematic Hydrophytic Vege	etation <sup>1</sup> (Ex	plain)
3. Scirpus cyperinus	10	No	OBL	- <sup>1</sup> Indicators of hydric soil and wetlar	nd hydrolog	gy must be
4. <i>Typha angustifolia</i>	10	No	OBL	present, unless disturbed or proble	matic	
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) o		liameter a
7				breast height (DBH), regardless of h	neight.	
3				Sapling/shrub – Woody plants less		BH and
				greater than or equal to 3.28 ft (1 m		
0				Herb – All herbaceous (non-woody)		ardless of
1				size, and woody plants less than 3.2		
2.				Woody vines – All woody vines grea	ter than 3.	28 ft in
	105	= Total Cov	ver 🛛	height.		
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u> )				Hydrophytic Vegetation Present?	Yes 🟒 N	0
I						
2.						
3.						
1.						
	0	= Total Cov	ver	-		

SOIL

	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
- 20	10YR 3/1	95	7.5YR 4/6	5	С	M	Clay Loam	
		· ·		· _				
		· ·		· —				
				· —				
				- <u> </u>			<b>C</b>	
	oncentration, D = I ndicators:	Pepleti	on, RM = Reduced	d Mat	rix, MS =	Masked Sand		on: PL = Pore Lining, M = Matrix. icators for Problematic Hydric Soils <sup>3</sup> :
Histosol Histic Ep Black Hi	(A1) vipedon (A2) stic (A3)		Polyvalue Be Thin Dark Su Loamy Muck	irface y Mir	(S9) <b>(LRF</b> neral (F1)	R, MLRA 149	B)	2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b> Coast Prairie Redox (A16) <b>(LRR K, L, R)</b> 5 cm Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b>
Stratifie Deplete	n Sulfide (A4) d Layers (A5) d Below Dark Surfa	ce (A11		itrix ( Surfa	F3) ce (F6)			Dark Surface (S7) <b>(LRR K, L)</b> Polyvalue Below Surface (S8) <b>(LRR K, L)</b> Thin Dark Surface (S9) <b>(LRR K, L)</b>
Sandy N	irk Surface (A12) lucky Mineral (S1) leyed Matrix (S4)		Depleted Da Redox Depre			1		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy R	edox (S5) I Matrix (S6)							Mesic Spodic (TA6) <b>(MLRA 144A, 145, 149B)</b> Red Parent Material (F21)
	rface (S7) <b>(LRR R, M</b>	LRA 14	9B)					Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	of hydrophytic vege	etation	and wetland hyd	rolog	y must b	e present, unl	ess disturbed or	problematic.
	.ayer (if observed): Type:		None			Hydric Soil P	resent?	Yes 🟒 No
	Depth (inches):		None	-		i iyune son i	resent:	
harks:								

#### Soil Photos



Photo of Sample Plot North Photo of Sample Plot South

