WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t Cit	ty/County:	Canajoharie, M	Nontgomery	/ County	,	Sampling Date:	2021-Sept-07	
Applicant/Owner: S	unEast				State:	NY		Sampling Point: <u>V</u>	V-RDS-01_UPL-1	
Investigator(s): Ryar	n Snow, Abi Lig	ht		Se	ction, Town	ship, Ra	nge: N/	A		
Landform (hillslope, te	errace, etc.):	Hillslope		Local reli	ef (concave,	convex,	none):	Convex	Slope (%):	5 to 10
Subregion (LRR or MLF	RA): LRR	L		La	t: 42.83362	94898	Long:	-74.5105525774	Datum: W	/GS84
Soil Map Unit Name:	Madalin Silty	/ Clay Loam, 0 to 3	percent slo	opes				NWI classifica	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical fo	r this time	of year?	Yes 🖌	_ No	(If no	, explain in Remar	ks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	_ significant _ naturally p	tly disturbed? problematic?	Are "N (If nee	lormal C ded, exp	ircumst olain an	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	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 mowing of vegetation.										

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one	e is required; check all tha	at apply)	Secondary Indicators (minimum o	<u>f two required)</u>	
 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 Sur 	Water-St Aquatic f Marl Dep Hydroge Oxidized Presence Recent Ir Thin Mut gery (B7) Other (E: face (B8)	tained Leaves (B9) Fauna (B13) posits (B15) n Sulfide Odor (C1) I Rhizospheres on Living Roots (C3) e of Reduced Iron (C4) ron Reduction in Tilled Soils (C6) ck Surface (C7) xplain in Remarks)	 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)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	Wetland Hydrology Present?	Yes No	
Describe Recorded Data (stream ga	uge, monitoring well, aer	ial photos, previous inspections), if	available:		
Remarks:					
The criterion for wetland hydrology	is not met. No positive ir	ndication of wetland hydrology was	observed.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-01_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	sheet:		
1	% Cover	Species?	Status	_ Number of Dominant : Are OBL, FACW, or FAC	Species That	2	(A)
2.				Total Number of Domi	nant Species	3	(B)
3 4.				Percent of Dominant S	pecies That	66.7	(A/B)
5.				Are OBL, FACW, or FAC			
6.				Prevalence Index work	isneet:	N. 4 147 1 1	D
7.				- <u>Iotal % Cover</u>	<u>or:</u>		<u>ву:</u>
	0	= Total Cov	er	- OBL species	0	x I =	0
Sapling/Shrub Stratum (Plot size:15 ft)		-		FACW species	55	×2= _	110
1. <u> </u>				FAC species	15	x3=	45
2.				- FACU species	40	x 4 =	160
3.				– UPL species	0	x 5 =	0
4				– Column Totals	110	(A)	315 (B)
5				- Prevalence l	ndex = B/A =	2.9	
S		<u> </u>		Hydrophytic Vegetatio	n Indicators:		
7				1- Rapid Test for	Hydrophytic V	egetation	
7		- Tatal Cau		– 🟒 2 - Dominance Te	est is >50%		
Line Charter (Districts - Eff.)	0	- 10tal Cov	er	3 - Prevalence Inc	dex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 It</u>)		Vee		4 - Morphologica	l Adaptations ¹	(Provide	supporting
1. Phalans arundinacea		Yes	FACW	– data in Remarks or on	a separate sh	eet)	
	25	Yes	FACU	Problematic Hyd	rophytic Vege	tation ¹ (Ex	plain)
3. <u>Irifolium pratense</u>	15	No	FACU	 Indicators of hydric so 	oil and wetlan	d hydrolog	gy must be
4				_ present, unless disturb	ped or probler	natic	
5				_ Definitions of Vegetati	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	more in c	diameter at
7				_ breast height (DBH), re	egardless of h	eight.	
8				Sapling/shrub - Wood	y plants less tl	han 3 in. D	OBH and
9				greater than or equal t	to 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, reg	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All woo	dy vines great	er than 3.	28 ft in
	95	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetatio	on Present?	′es 🟒 N	lo
1. Vitis riparia	15	Yes	FAC				
2.				-			
3.				-			
4.				-			
	15	= Total Cov	er	-			
		_					

Maintained road shoulder. 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	Matrix	o the ut	Redox	Feat	ures	malcutor				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Te	exture		Remarks
0 - 18	10YR 3/4	100		-			Gravell	y Clay Loam		
				·						
				·						
				·						
				·						
				· —						
		Depletio	n RM = Reduced	Mate	ix MC -	Maskod	Sand Grains 2	ocation: PL = Poro Lini		atrix
ype. c = c		Jepierio	n, nivi – Reduced	widt	- כועו , או	waskeu	Sanu Granns, *L	Indicators for Proble	matic Luc	tric Soiles
Histosol	(A1)		Polyvalue Re	low s	urface (S	8) (PP	R MIRA 149R)			
Histic Fr	bipedon (A2)		Thin Dark Su	rface	(S9) (I RF		A 149B)	2 cm Muck (A10)) (LRR K, L,	MLRA 149B)
Black Hi	stic (A3)		Loamy Muck	v Min	eral (F1)	(LRR K, I	_)	Coast Prairie Ree	dox (A16) (
Hydroge	en Sulfide (A4)		Loamy Gleye	, d Ma	trix (F2)			5 cm Mucky Pea	L OF Peal (3	53) (LKK K, L, K) \
Stratifie	d Layers (A5)		Depleted Ma	trix (l	-3)			Polyvalue Below	Surface (S	(IRR K I)
Deplete	d Below Dark Surfa	ice (A11)	Redox Dark S	Surfa	ce (F6)			Thin Dark Surfac	e (S9) (I RF	R K. I.)
_ Thick Da	ark Surface (A12)		Depleted Dar	'k Sui	face (F7))		Iron-Manganese	Masses (F	-12) (LRR K. L. R)
_ Sandy N	lucky Mineral (S1)		Redox Depre	ssior	is (F8)			Piedmont Flood	plain Soils	(F19) (MLRA 149B)
Sandy G	ileyed Matrix (S4)							Mesic Spodic (TA	, (MLRA ⁻	144A, 145, 149B)
Sandy R	edox (S5)							Red Parent Mate	erial (F21)	
Stripped	d Matrix (S6)							Very Shallow Da	rk Surface	(TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 149	9B)					Other (Explain ir	n Remarks))
ndicators	of hydrophytic veg	etation a	and wetland hydr	ology	/ must be	e presen	t, unless disturbe	d or problematic.		
estrictive l	_ayer (if observed):									
	Туре:		None			Hydric	Soil Present?		Yes	No 🟒
	Depth (inches):			-		-				
emarks:										
o positive	indication of hydri	c soils w	as observed. The	crite	rion for	hydric so	oil is not met.			

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:	Canajoharie, Mo	ontgomery Count	у	Sampling Date:	2021-Sept-07	
Applicant/Owner: S	unEast				State: NY		Sampling Point: W	-RDS-02_PEM-1	
Investigator(s): Ryar	n Snow, Abi Lig	;ht		Sect	ion, Township, R	ange: N	4		
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave, convex	, none):	Concave	Slope (%):	1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8376654348	Long:	-74.5146309533	Datum: WG	iS84
Soil Map Unit Name:	llion silt loar	n, 0 to 3 percent	slopes				NWI classifica	tion: None	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No _	(If no	, explain in Remark	<s.)< td=""><td></td></s.)<>	
Are Vegetation 🟒,	Soil,	or Hydrology	significant	tly disturbed?	Are "Normal	Circumst	ances" present?	Yes No _	1
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed, ex	plain an	y answers in Remai	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	lf yes, optional Wetland Site ID:	W-RDS-02							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, 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 t	that apply)	Secondary Indicators (minimum of two required)		
 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 II Sparsely Vegetated Concave Statement 	Water- Aquati Marl D Hydrog Oxidize Presen Recent Thin M magery (B7) Other of Surface (B8)	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)	 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	Yes No Yes No Yes No gauge, monitoring well, a	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspections), if	 Wetland Hydrology Present? Yes _∠_ No available:		
Remarks:					

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (at least two secondary indicators).

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-02_PEM-1

Tree Stratum (Plot size: 20 ft)	Absolute	Dominant	Indicator	Dominance Test workshee	et:		
	% Cover	Species?	Status	Number of Dominant Spe Are OBL, FACW, or FAC:	cies That	2	(A)
2.				Total Number of Dominan	nt Species	2	(B)
3				Percent of Dominant Spec	cies That	100	(A/B)
5.				Are OBL, FACW, or FAC:	4.		
6.				- Prevalence Index worksne	et:		D
7.				- <u>Iotal % Cover of:</u>	25		<u>ву:</u> Эг
	0	= Total Cove	er		25	x I = _	25
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	/5	x 2 = _	150
1.				FAC species	0	x 3 =	0
2				FACU species	0	x 4 =	0
		<u> </u>		UPL species	0	x 5 =	0
				- Column Totals	100	(A)	175 (B)
4		<u> </u>		Prevalence Inde	x = B/A =	1.8	
s				 Hydrophytic Vegetation In 	dicators:		
o				1- Rapid Test for Hyd	lrophytic V	egetation	1
7				2 - Dominance Test is	s >50%	•	
	0	= Total Cove	er	3 - Prevalence Index	is ≤ 3.01		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological Ad	laptations ¹	(Provide	supporting
1. <i>Phalaris arundinacea</i>	65	Yes	FACW	- data in Remarks or on a se	eparate sh	eet)	0
2. Juncus effusus	25	Yes	OBL	Problematic Hydropl	, hytic Veget	ation ¹ (E>	(plain)
3. <i>Equisetum palustre</i>	10	No	FACW	¹ Indicators of hydric soil a	nd wetland	d hydrolo	gy must be
4				present, unless disturbed	or probler	natic	
5				Definitions of Vegetation	Strata:		
6.				Tree – Woody plants 3 in. ((7.6 cm) or	more in	diameter at
7.				breast height (DBH), regar	dless of he	eight.	
8.				Sapling/shrub - Woody pla	ants less th	han 3 in. [OBH and
9.				greater than or equal to 3	.28 ft (1 m)) tall.	
10.				Herb – All herbaceous (no	n-woody) (olants, reg	gardless of
11				size, and woody plants les	s than 3.2	8 ft tall.	
12				Woody vines – All woody v	/ines great	er than 3	.28 ft in
12	100	- Total Cov	or	height.			
Woody Vine Stratum (Plot size: 30 ft)	100		-	Hydrophytic Vegetation P	resent? Y	′es 🟒 N	lo
1.							
2				-			
3				-			
·		<u> </u>		-			
⁺⁺		= Total Cov	or	-			
	0		- 1	_}			

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

Active agricultural field. 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

Profile Des	cription: (Describe 1	to the	depth needed to d	docum	nent the i	indicato	r or confirm the a	absence of indicators.)
Depth	Matrix		Redox	Featu	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	e Remarks
0 - 5	10YR 3/1	90	10YR 5/6	10	C	М	Clay Loai	am
5 - 20	10YR 4/1	60	10YR 4/4	30	с	M	Clay	
5 - 20	10YR 2/1		10YR 2/1	10	D	М	Clav	
				·				
					<u> </u>			
¹ Type: C = 0	Concentration, D = l	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² L	Location: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	urface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Mucl	ky Min	eral (F1)	(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted Ma	atrix (I	-3)			Polyvalue Below Surface (S8) (LRR K, L)
Deplete	a Below Dark Surfa	ace (A I	I) ✓ Redox Dark	Surta	CE (F6)			Thin Dark Surface (S9) (LRR K, L)
THICK D	drk Suriace (ATZ) Auchy Mineral (S1)		Depieted Da	ark Sui	(FR))		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy (Cloved Matrix (C4)			255101	із (го)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy C	Dedex (SE)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sanuy r	d Matrix (CC)							Red Parent Material (F21)
Strippe	u Matrix (S6)		40D)					Very Shallow Dark Surface (TF12)
Dark SL	ITTACE (S7) (LRR R, N	ILKA I	49B)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	Irolog	y must b	e preser	nt, unless disturbe	ed or problematic.
Restrictive	Layer (if observed):							
	Type:		None			Hydric	Soil Present?	Yes _ 🖌 No
	Depth (inches):					1		
Remarks:								
A nositivo i	ndication of hydric	soilwa	s observed The	ritoria	on for hy	dric soil	is met	
A positive i	naication of flyanc	3011 100	is observed. The c	.incent	JI IOI IIy		is met.	

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 Project	City/County	: Canajoharie, Mo	ntgomery County	/	Sampling Date: 20	21-Sept-07	
Applicant/Owner: S	unEast			State: NY		Sampling Point: W-R	DS-02_UPL-1	
Investigator(s): Ryan	i Snow, Abi Lig	ht	Secti	ion, Township, Ra	nge: NA	Ą		
Landform (hillslope, te	rrace, etc.):	Flat	Local relief	(concave, convex,	, none):	Undulating	Slope (%): 2 to :	5
Subregion (LRR or MLR	A): LRR I	-	Lat:	42.8377405083	Long:	-74.5144750981	Datum: WGS84	
Soil Map Unit Name:	llion silt loan	n, 3 to 5 percent slopes				NWI classificatio	n: None	
Are climatic/hydrologic	conditions or	the site typical for this time	e of year?	Yes 🟒 No 🔄	(lf no	, explain in Remarks.)	1	
Are Vegetation 🟒,	Soil,	or Hydrology significa	ntly disturbed?	Are "Normal (Circumst	ances" present?	Yes No 🟒	
Are Vegetation,	Soil,	or Hydrology naturally	problematic?	(If needed, ex	plain an	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 🟒	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. Circumstances are not normal due to agricultural activities.										

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one	<u>e is required; check all t</u>	<u>nat apply)</u>	Secondary Indicators (minimum o	of two required)
 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 Sur 	Water-S Aquatic Marl De Hydrog Oxidize Presend Recent Thin Mu gery (B7)Other (1) face (B8)	Stained Leaves (B9) Fauna (B13) eposits (B15) en Sulfide Odor (C1) d Rhizospheres on Living Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	 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 (D1 Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	agery (C9) I)
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
Describe Recorded Data (stream ga	uge, monitoring well, ae	rial photos, previous inspections), if	available:	
Remarks:				
The criterion for wetland hydrology	is not met. No positive i	indication of wetland hydrology was	observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-02_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:				
1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)		
2.				Total Number of Dominant Species	2	(B)		
3				Across All Strata:				
4		·		Are OBL, FACW, or FAC:	0	(A/B)		
5.				Prevalence Index worksheet:				
6				Total % Cover of:	Multiply	By:		
7		<u> </u>		OBL species 0	x 1 =	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		
1				FACU species 100	x 4 =	400		
2				UPL species 0	x 5 =	0		
3				Column Totals 100	(A) -	400 (B)		
4				$\frac{1}{100}$	(~) _/	400 (B)		
5								
6				1 Daniel Test for Underschutic	(
7				1- Rapid Test for Hydrophylic	/egetation	1		
	0	= Total Cov	er	2 - Dominance Test is > 50%				
Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Index is $\leq 3.0^{\circ}$				
1. Poa pratensis	50	Yes	FACU	4 - Morphological Adaptations	¹ (Provide	supporting		
2. Trifolium repens	35	Yes	FACU	data in Remarks or on a separate si	ieet)			
3. Trifolium pratense	15	No	FACU	Indicators of hydris coil and wotlan	d bydrolo	kpiain) gu must bo		
4.		· ·		present unless disturbed or proble	matic	gy must be		
5.		· ·		Definitions of Vegetation Strata:	matic			
6.				Tree - Woody plants 3 in (7.6 cm) o	r more in	diameter at		
7.				breast height (DBH), regardless of h	eight.			
8				Sapling/shrub – Woody plants less t	han 3 in. [DBH and		
9				greater than or equal to 3.28 ft (1 m	ı) tall.			
10				Herb – All herbaceous (non-woody)	plants, re	gardless of		
11		· ·		size, and woody plants less than 3.2	8 ft tall.	0		
10				Woody vines – All woody vines grea	ter than 3	.28 ft in		
12	100	- Tatal Cau		height.				
	100	= lotal Cov	er	Hydrophytic Vegetation Present?	Yes M	No ./		
Woody Vine Stratum (Plot size: <u>30 ft</u>)						···		
1		<u> </u>		-				
2.								
3		<u> </u>						
4								
	0	= Total Cov	er					
Remarks: (Include photo numbers here or on a separat	e sheet.)			—				
Active agricultural field. No positive indication of hydror	ohytic veg	etation was	observed (≥	≥50% of dominant species indexed as	FAC- or d	lrier).		
	J 0							

SOIL

Profile Des	cription: (Describe	to the d	epth needed to d	ocum	nent the i	indicator	or confirm the a	bsence of indicators.)
Deptn	Matrix		Redox	Feat	ures		- .	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Туре	Loc ²	lexture	Remarks
0-3	10YR 3/1	100		_			Clay Loar	n
3 - 10	10YR 3/1	95	7.5YR 4/1	5		<u>M</u>	Clay	
10 - 20	10YR 4/2	85	10YR 4/4	15	<u> </u>	M	Clay	
		·						
		·						
		·						
		·						
·		·						
¹ Type: C = C	Concentration, D =	Depletio	on, RM = Reduced	l Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Be	low S	urface (S	58) (LRR I	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	Dipedon (A2)		Thin Dark Su	rtace	(S9) (LRF	(R, MLR/	а 149В) \	Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	istic (A3) on Sulfido (A4)			y iviin d Ma	eral (FT) triv (E2)	(LKK K, L	-)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Tyurogo Stratifie	d Lavers (A5)		∠ Depleted Ma	trix (l	-3)			Dark Surface (S7) (LRR K, L)
Deplete	d Below Dark Surf	ace (A11	Redox Dark	Surfa	ce (F6)			Polyvalue Below Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	rk Su	face (F7))		Thin Dark Surface (S9) (LRR K, L)
Sandy N	/lucky Mineral (S1)		Redox Depre	essior	is (F8)			Iron-Manganese Masses (FT2) (LRR K, L, R)
Sandy C	Gleyed Matrix (S4)							Pleatholic Floodplain Solis (FT9) (MERA 149B) Mosic Spedic (TA6) (MERA 144A, 145, 149B)
Sandy R	Redox (S5)							Red Parent Material (F21)
Stripped	d Matrix (S6)							Very Shallow Dark Surface (TE12)
Dark Su	irface (S7) (LRR R, M	MLRA 14	9B)					Other (Explain in Remarks)
³ Indicators	of hydrophytic yea	retation	and wetland hvd	rolog	/ must b	e presen	t. unless disturbe	d or problematic.
Restrictive	Laver (if observed)	:	, <u>,</u>	0.	,	Í	,	
	Type:		None			Hydric	Soil Present?	Yes 🖌 No
	Depth (inches):					,		
Remarks:								
A positive in	ndication of hvdric	soil was	s observed. The c	riterio	on for hv	dric soil	s met.	





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, Mon	tgomery County		Sampling Date: 2021-Sept-08		
Applicant/Owner: S	unEast				State: NY		Sampling Point: <u>\</u>	N-RDS-04_PEM-1	
Investigator(s): Ryar	า Snow, Abi Lig	ght		See	tion, Township, Ra	nge: NA	4		
Landform (hillslope, te	rrace, etc.):	Depression		Local relie	f (concave, convex,	none):	Concave	Slope (%): 2 to 5	
Subregion (LRR or MLF	RA): LRR	L		Lat	42.8291873635	Long:	-74.4852114452	Datum: WGS84	
Soil Map Unit Name:	llion silt loar	n, 3 to 8 percent					NWI classific	ation: None	
Are climatic/hydrologic	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	significant	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-RDS-04							
Remarks: (Explain alternative procedures he	re 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 that apply)	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) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 	 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? Yes No Depth (inches):	
Water Table Present? Yes 🖌 No Depth (inches): 8	Wetland Hydrology Present? Yes No
Saturation Present? Yes 🖌 No Depth (inches): 1	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was obser	available: ved (primary and secondary indicators were present).

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-04_PEM-1

Tree Christian (Distring) 20 ft	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>iree Stratum</u> (Piot Size: <u>30 It</u>)	% Cover	Species?	Status	Number of Dominant S	Species That	1	(A)
1				Are OBL, FACW, or FAC	:		
2.				Total Number of Domi	nant Species	1	(B)
3				Across All Strata:			
4.				Percent of Dominant S	pecies That	100	(A/B)
5.				Are OBL, FACW, of FAC			<u> </u>
6.				- Prevalence Index Work	sneet:		-
7.				- <u>Iotal % Cover</u>	<u>or:</u>	Multiply	<u>ву:</u>
	0	= Total Cov	ver	- OBL species -	0	x I =	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	95	x 2 =	190
1.				FAC species	0	x 3 =	0
2				– FACU species –	0	x 4 =	0
3	<u> </u>			– UPL species –	0	x 5 =	0
4				– Column Totals	95	(A)	190 (B)
		<u> </u>		Prevalence Ir	ndex = B/A =	2	
s		<u> </u>		 Hydrophytic Vegetation 	n Indicators:		
7	. <u> </u>			1- Rapid Test for H	Hydrophytic V	egetatior/	ı
/		- Total Car		2 - Dominance Te	st is >50%		
	0		rer	3 - Prevalence Inc	lex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)	00		EA CIAL	4 - Morphological	Adaptations ¹	(Provide	supporting
1. Phalaris arundinacea	80	Yes	FACW	– data in Remarks or on	a separate sh	ieet)	
2. Cornus amomum	10	NO	FACW	– Problematic Hydr	ophytic Vege	tation ¹ (Ex	kplain)
3. <u>Onoclea sensibilis</u>	5	No	FACW	 ¹Indicators of hydric so 	il and wetlan	d hydrolo	gy must be
4				present, unless disturb	ed or probler	matic	
5				_ Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub – Woody	/ plants less tl	han 3 in. I	DBH and
9				greater than or equal t	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	dy vines great	ter than 3	.28 ft in
	95	= Total Cov	ver	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetatio	n Present?	/es 🟒 N	No
1.							
2.				-			
3.				-			
4.				-			
	0	= Total Cov	ver	-			
Demonstrative (the shade on the state second size the second seco							

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

Profile Des	scription: (Describe	to the c	lepth needed to d	locun	nent the i	indicato	r or confirm the at	osence of indicators.)
Depth	Matrix		Redox	<pre>< Feat</pre>	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 4	10YR 3/2	100					Silty Clay	
4 - 12	10YR 2/1	85	10YR 4/6	15	С	М	Clay Loan	n
12 - 20	10YR 4/1	90	2.5Y 5/6	10	С	М	Silty Clay	
				·				
				·				
				·				
¹ Type: C =	Concentration, D =	Depleti	on, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	ol (A1)		Polyvalue Be	low S	urface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	irface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black F	IISTIC (A3)			y wir	ieral (FT) triv (E2)	(LRR K, I	_)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hyurog Stratifi	ed Lavers (A5)		Loanly Gleye	trix (l	U IX (FZ) F3)			Dark Surface (S7) (LRR K, L)
Deplet	ed Below Dark Surf	ace (A1	1) ✓ Redox Dark	Surfa	ce (F6)			Polyvalue Below Surface (S8) (LRR K, L)
Thick D	Oark Surface (A12)		Depleted Da	rk Su	rface (F7))		Thin Dark Surface (S9) (LRR K, L)
Sandy	Mucky Mineral (S1)		Redox Depre	essior	ns (F8)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy	Gleved Matrix (S4)							Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy	Redox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Strippe	ed Matrix (S6)							Red Parent Material (F21)
Dark S	urface (S7) (LRR R, N	/LRA 14	19B)					Very Shallow Dark Surface (TFT2)
³ Indicators	s of hydrophytic veg	etation	and wetland hyd	rolog	y must b	e preser	it, unless disturbe	d or problematic.
Restrictive	Layer (if observed)							
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks:								
A positive	indication of hydric	soil wa	s observed. The c	riterio	on for hy	dric soil	is met.	

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			ity/County:	Sprakers, Mont	gomery County		Sampling Date: 2021-Sept-08		
Applicant/Owner: S	unEast				State: NY		Sampling Point: <u>W</u>	/-RDS-04_UPL-1	
Investigator(s): Ryar	n Snow, Abi Lig	ht		Sect	ion, Township, Ra	nge: N/	4		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave, convex,	none):	Undulating	Slope (%): 2 to 5	
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8290519776	Long:	-74.4851882349	Datum: WGS84	
Soil Map Unit Name:	llion silt loar	n, 3 to 8 percent s	slopes				NWI classifica	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical f	or this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remarl	ks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	_ significant _ naturally p	tly disturbed? problematic?	Are "Normal C (If needed, exp	Circumst plain an	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 _	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 of one	Secondary Indicators (minimum o	of two required)		
 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 Sur 	Water-5 Aquatio Marl De Hydrog Oxidize Presend Recent Thin Mi gery (B7) Other (face (B8)	Stained Leaves (B9) : 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)	 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 (D1 Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	agery (C9))
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):	– – –	Yes No
Describe Recorded Data (stream ga	uge, monitoring well, ae	erial photos, previous inspections), il	available:	
Remarks:				
The criterion for wetland hydrology	is not met. No positive	indication of wetland hydrology was	observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-04_UPL-1

A Tree Stratum (Plot size: 30 ft)	osolute	Dominant	Indicator	Dominance Test works	heet:			
<u> </u>) Cover	Species?	Status	Number of Dominant S	pecies That	0	(A)	
1				Total Number of Domir	hant Species			
2				Across All Strata:	iant species	2	(B)	
3		<u> </u>		Percent of Dominant S	pecies That		(4 (D)	
4		<u> </u>		Are OBL, FACW, or FAC		0	(A/B)	
5				Prevalence Index works	sheet:			
0				Total % Cover	<u>of:</u>	<u>Multiply</u>	<u>' By:</u>	
7		- Tatal Cau		OBL species	0	x 1 =	0	
	0		er	FACW species	10	x 2 =	20	
Saping/Shrub Stratum (Plot Size: <u>15 ft</u>)				FAC species	5	x 3 =	15	
·		<u> </u>		FACU species	95	x 4 =	380	
2				UPL species	0	x 5 =	0	
3				Column Totals	110	(A)	415 (B)	
4				Prevalence Ir	ndex = B/A =	3.8		
5				Hydrophytic Vegetation	Indicators:			
6				1- Rapid Test for H	-vdrophytic V	egetation	า	
7				- 2 - Dominance Test is > 50%				
-	0	= Total Cove	er	$3 - Prevalence Index is < 3.0^{1}$				
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptations ¹ (Provide supporting				
1. <i>Solidago altissima</i>	55	Yes	FACU	- data in Remarks or on a separate sheet)				
2. Phleum pratense	35	Yes	FACU	Problematic Hydr	ophytic Vege	tation ¹ (E	xplain)	
3. <i>Cornus amomum</i>	10	No	FACW	¹ Indicators of hydric so	il and wetlan	d hydrolo	bgy must be	
4. Trifolium repens	5	No	FACU	present, unless disturb	ed or probler	matic	0,	
5. <i>Rhamnus cathartica</i>	5	No	FAC	Definitions of Vegetation	on Strata:			
6				Tree – Woody plants 3 i	in. (7.6 cm) or	r more in	diameter at	
7				breast height (DBH), re	gardless of h	eight.		
8.				Sapling/shrub - Woody	plants less tl	han 3 in.	DBH and	
9.				greater than or equal to	o 3.28 ft (1 m) tall.		
10.				Herb – All herbaceous ((non-woody)	plants, re	gardless of	
11.				size, and woody plants	less than 3.2	8 ft tall.		
12.				Woody vines – All wood	dy vines great	ter than 3	3.28 ft in	
	110	= Total Cove	er	height.				
— — — — — — — — — — — — — — — — — — —		-		Hydrophytic Vegetatio	n Present?	/es l	No 🟒	
1.								
2.				•				
3				•				
4				•				
···	0	= Total Cove	٥r					
Remarks: (Include photo numbers here or on a separate s	heet.)							
No positive indication of hydrophytic vegetation was obse	rved (≥	50% of dom	inant specie	es indexed as FAC– or dri	er).			

SOIL

Color (moist) % D - 18 10YR 3/2 100	Color (moist) % Type	Loc² Texture Silty Clay	Remarks / </th		
D-18 10YR 3/2 100		Silty Clay			
	= =				
		· ·			
e: C = Concentration, D = Depletion	on, RM = Reduced Matrix, MS	S = Masked Sand Grains. ² L	location: PL = Pore Lining, M = Matrix.		
ric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
listosol (A1)	Polyvalue Below Surface	e (S8) (LRR R, MLRA 149B)	2 cm Muck (A10) (LRR K. L. MLRA 149B)		
Histic Epipedon (A2)	Thin Dark Surface (S9) (I	LRR R, MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histic (A3)	Loamy Mucky Mineral (F	F1) (LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F	2)	Dark Surface (S7) (LRR K, L)		
stratified Layers (A5)	Depleted Matrix (F3)		Polyvalue Below Surface (S8) (LRR K, L)		
Depieted Below Dark Surface (ATT	Redux Dark Surface (F6)) (E7)	Thin Dark Surface (S9) (LRR K, L)		
andy Mucky Mineral (S1)	Depieted Dark Surface (Redox Depressions (F8)	[[]]	Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Gleved 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 14	9B)		Very Shallow Dark Surface (TF12)		
			Other (Explain in Remarks)		
licators of hydrophytic vegetation	and wetland hydrology mus	t be present, unless disturbe	ed or problematic.		
trictive Layer (if observed):					
Туре:	None	Hydric Soil Present?	Yes No 🟒		
Depth (inches):					

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 C			City/County: Sprakers, Montgomery			Sampling Date: 2021-Sept-08		
Applicant/Owner: SunEast			State: NY			Sampling Point: W-RDS-05_PFO-1		
Investigator(s):Ryan Snow, Abi Light Section, Township, Range:NA								
Landform (hillslope, te	rrace, etc.):	Flood Plain	Local relief	(concave, convex	, none):	Convex	Slope (%): 1 to 3	
Subregion (LRR or MLF	RA): LRR I	L	Lat:	42.831837	Long:	-74.486757	Datum: WGS84	
Soil Map Unit Name:	Lansing and	Mohawk silt loams, LMF				NWI classifica	tion: None	
Are climatic/hydrologic	conditions or	n the site typical for this tim	ne of year?	Yes 🟒 No 🔄	(lf nc	, explain in Remark	(S.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology significa or Hydrology natural	antly disturbed? ly problematic?	Are "Normal (If needed, ex	Circumst cplain an	ances" present? y answers in Remai	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	lf yes, optional Wetland Site ID:	W-RDS-05						
Remarks: (Explain alternative procedures he	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 c	one is required; check all	Secondary Indicators (minimum of two required)		
 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 In Sparsely Vegetated Concave S 	Water- Aquati Hydro Oxidiz Preser Recen Thin M nagery (B7)Other urface (B8)	 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?	Yes No 🟒	Depth (inches):		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes 🟒 No	
Saturation Present?	Yes 🟒 No	Depth (inches): 5		
(includes capillary fringe)				
Describe Recorded Data (stream Remarks: The criterion for wetland hydrolo	gauge, monitoring well, a	aerial photos, previous inspections	;), if available: bserved (primary and secondary indicators were present	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-05_PFO-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant	Indicator Status	Dominance Test works	heet:			
1 Populus deltoides	65	Yes	FAC	Are OBL, FACW, or FAC:		4	(A)	
2 Tsuga canadensis	25	Yes	FACU	Total Number of Dominant Species		6	(D)	
3 Platanus occidentalis	5	No	FACW	Across All Strata:		0	(B)	
4.			inciv	 Percent of Dominant Species That Are OBL, FACW, or FAC: 		66.7	(A/B)	
5		·		 Prevalence Index worksheet: 				
6.				- <u>Total % Cover of:</u>		<u>Multiply</u>	<u>By:</u>	
/				OBL species	20	x 1 =	20	
	95	= Total Cov	er	FACW species	55	x 2 =	110	
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	65	x 3 =	195	
1. <u>Fagus grandifolia</u>	25	Yes	FACU	FACU species	55	x 4 =	220	
2. Ostrya virginiana	5	No	FACU	UPL species	0	x 5 =	0	
3				Column Totals	195	(A)	545 (B)	
4				Prevalence Ir	dex = B/A =	2.8	0.0 (0)	
5	<u> </u>						·	
6				Hydrophytic Vegetation	indicators:			
7.				1- Rapid Test for Hydrophytic Vegetation			1	
	30	= Total Cov	er	2 - Dominance Test is >50%				
Herb Stratum (Plot size: <u>5 ft</u>)		-		3 - Prevalence Ind	lex is $\leq 3.0^{\circ}$			
1. Osmundastrum cinnamomeum	25	Yes	FACW	4 - Morphological Adaptations ¹ (Provide supporting			supporting	
2. Leersia oryzoides	20	Yes	OBL					
3. Impatiens capensis	15	Yes	FACW	Problematic Hydrophytic Vegetation' (Explain)			(piain) mumuut ka	
4. Lvsimachia nummularia	10	No	FACW	present unless disturbed or problematic			gy must be	
5.			-	Definitions of Vegetatio	n Strata	matic		
6	·	· ·		Trop Woody plants 2	(7.6 cm) or	r moro in	diameter at	
7		·		hreast height (DBH) re	gardless of h	eight		
, 8	·	·		Sanling/shruh - Woody	nlants less t	han 3 in T	OBH and	
o		<u> </u>		greater than or equal t	0.3.28 ft (1 m) tall.	Diriana	
3				Herb – All herbaceous	(non-woody)	nlants re	pardless of	
	·	·		size, and woody plants	less than 3.2	8 ft tall.	Sararesser	
	·	<u> </u>		Woody vines - All wood	dv vines great	ter than 3	.28 ft in	
12				height.	,,			
	70	= Total Cov	er	Hydrophytic Vegetatio	n Procont2			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Tiyuropriyuc vegetatio	ii riesent:	ies <u>v</u> i		
1								
2								
3								
4	<u> </u>							
	0	= Total Cov	er					
Remarks: (Include photo numbers here or on a separa	te 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 Des	cription: (Describe	to the c	lepth needed to c	locum	nent the i	indicator	or confirm the al	bsence of indicators	s.)
Depth	Matrix		Redo	<pre>< Feat</pre>	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0 - 3	10YR 4/2	100					Silt L	oam	
3 - 7	10YR 3/1	90	10YR 4/4	10	С	Μ	Clay	Loam	
7 - 25	N 4/	100					Sandy C	lay Loam	
				·					
				·				- · ·	
				·				·	
								·	
				·				·	
				·	<u> </u>			· · ·	
			·			<u> </u>			
1 Type: C = C	Concentration, D =	Depleti	on, RM = Reduced	l Mati	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Li	ining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Prol	blematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Be	low S	urtace (S	8) (LRR F	R, MLRA 149B)	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLRA	A 149B)	Coast Prairie R	Redox (A16) (LRR K, L, R)
Black Hi	istic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L	.)	5 cm Mucky Pe	eat or Peat (S3) (LRR K, L, R)
Hydroge	en Sullide (A4)		Loarny Gleye	triv (I	LFIX (FZ)			Dark Surface (S7) (LRR K, L)
Stratine	d Below Dark Surf		Depleted Ma	Surfa	-5) -6 (E6)			Polyvalue Belo	w Surface (S8) (LRR K, L)
Depiete	ark Surface (A12)		Depleted Da	rk Sui	face (F7)			Thin Dark Surf	^F ace (S9) (LRR K, L)
Sandy N	/ucky Mineral (S1)		Bedox Depre	ssior	1000 (F8)			Iron-Mangane	se Masses (F12) (LRR K, L, R)
Sandy (Sloved Matrix (SA)			200101	15 (10)			Piedmont Floo	odplain Soils (F19) (MLRA 149B)
Sandy E	2edox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Strippor	d Matrix (S6)							Red Parent Ma	aterial (F21)
Suipped								Very Shallow D	Dark Surface (TF12)
Dark Su	111ace (37) (LKK K, 1		·9D)					Other (Explain	in Remarks)
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must be	e presen	t, unless disturbe	d or problematic.	
Restrictive	Layer (if observed)	:							
	Type:		None			Hydric	Soil Present?	,	Yes 🟒 No
	Depth (inches):			•					
Remarks:									
A positive i	ndication of hydric	: soil wa	s observed. The c	riterio	on for hyd	dric soil i	s met.		

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/Co	unty: Sprakers, Montg	gomery	Sam	npling Date: 20	021-Sept-08
Applicant/Owner: S	unEast			State: NY	Samp	ling Point: W-F	RDS-05_UPL-1
Investigator(s): Ryar	n Snow, Abi Lig	ht	Sect	ion, Township, Ra	nge: NA		
Landform (hillslope, te	rrace, etc.):	Hillslope	Local relief	(concave, convex	, none): Undu	ulating	Slope (%): 15 to 20
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.831654382	Long: -74.4	867749968	Datum: WGS84
Soil Map Unit Name:	Lansing and	Mohawk silt loams, LMF	:			NWI classificati	on: None
Are climatic/hydrologic	c conditions o	n the site typical for this	time of year?	Yes 🟒 No 🔄	(If no, expl	ain in Remarks	.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology signi or Hydrology natu	ficantly disturbed? rally problematic?	Are "Normal ((If needed, ex	Circumstances plain any ansv	;" present? wers 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 procedures l	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	<u>ne is required; check all t</u>	<u>hat apply)</u>	Secondary Indicators (minimum	of two required)
 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 Im Sparsely Vegetated Concave Sume 	Water- Aquatii Marl D Hydrog Oxidize Presen Recent Thin M agery (B7) Other urface (B8)	 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, a	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspections), i	 Wetland Hydrology Present? f available:	Yes No
Remarks: The criterion for wetland hydrolog	y is not met. No positive	indication of wetland hydrology was	s observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-05_UPL-1

Tree Stratum (Blat size) 20 ft	Absolute	Dominant	Indicator	Dominance Test works	heet:		
	% Cover	Species?	Status	Number of Dominant S	pecies That	1	(A)
1. <i>Tsuga canadensis</i>	65	Yes	FACU	Are OBL, FACW, or FAC:			
2. <i>Ostrya virginiana</i>	20	Yes	FACU	Total Number of Domir	nant Species	5	(B)
3. Prunus serotina	10	No	FACU	Across All Strata:			
4.				Percent of Dominant S	pecies That	20	(A/B)
5.				Are OBL, FACW, or FAC			
6.				Prevalence Index works	sneet:		D
7.		· ·		Iotal % Cover	<u>of:</u>	Multiply	<u>By:</u>
	95	= Total Cov	er	OBL species	0	x I =	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	15	x2= -	30
1. Tsuga canadensis	15	Yes	FACU	FAC species	0	x 3 =	0
2.				FACU species	110	x 4 =	440
3		•		UPL species	5	x 5 =	25
<u> </u>				Column Totals	130	(A)	495 (B)
т Б				Prevalence In	ndex = B/A =	3.8	
S		······································		Hydrophytic Vegetation	Indicators:		
0				1- Rapid Test for H	lydrophytic V	egetatior/	ı
<i>1.</i>	15	- Tatal Cau		2 - Dominance Tes	st is > 50%		
	15		er	3 - Prevalence Ind	ex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)	45		EA CIAL	4 - Morphological	Adaptations	(Provide	supporting
1. Dryopteris carthusiana	- 15	Yes	FACW	data in Remarks or on a	a separate sh	leet)	
2. Fragaria vesca	5	Yes	UPL	Problematic Hydr	ophytic Vege	tation ¹ (Ex	kplain)
3		·		¹ Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4		·		present, unless disturb	ed or problei	matic	
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3 i	n. (7.6 cm) or	r more in	diameter at
7		······································		breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub – Woody	plants less t	han 3 in. I	DBH and
9				greater than or equal to	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous ((non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	20.6
12				Woody vines – All wood	ly vines great	ter than 3	.28 ft in
	20	= Total Cov	er	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		_		Hydrophytic Vegetatio	n Present?	/es N	No 🔽
1.							
2.							
3.							
4.		· ·					
	0	= Total Cov	er				
		-		1			
Remarks: (Include photo numbers here or on a separate	e sneet.)	F00/ 6 1			,		
No positive indication of hydrophytic vegetation was ob	served (≥	50% of dom	iinant specie	es indexed as FAC– or dri	er).		

SOIL

Profile Des	cription: (Describe	to the de	epth needed to de	ocum	nent the i	ndicato	r or confirm the at	osence of indicators.)		
Depth	Matrix		Redox	Feat	tures						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure			Remarks
0 - 6	10YR 3/1	100					Silt Lo	bam			
6 - 16	10YR 5/1	100		_			Silty Cla	y Loam			
				_							
				_							
				_							
				_							
				_							
				_							
¹ Type: C = 0	Concentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Li	ning, I	M = Ma	atrix.
Hydric Soil	Indicators:							Indicators for Prob	lemat	ic Hyd	ric Soils ³ :
Histoso	l (A1)		Polyvalue Bel	ow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A1)) (LRI	R K, L. I	MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Sur	face	(S9) (LRR	R, MLR	A 149B)	Coast Prairie R	edox (A16) (I	LRR K, L, R)
Black H	istic (A3)		Loamy Mucky	Min	eral (F1)	(LRR K, I	_)	5 cm Mucky Pe	at or l	Peat (S	53) (LRR K, L, R)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S	7) (LR	R K, L)	
Stratifie	d Layers (A5)	(\ 1 1	Depleted Mat	rix (I	-3)			Polyvalue Belo	w Surf	ace (S	8) (LRR K, L)
Depiete	ark Surface (A12)	ace (ATT	Depleted Dark 3	uria k Suu	rface (FO)			Thin Dark Surfa	ace (S	9) (LRR	: K, L)
Sandy M	Aucky Mineral (S1)		Bedox Depre	ssior	nace (i 7) ns (F8)			Iron-Manganes	e Mas	ses (F	12) (LRR K, L, R)
Sandy (Sleved Matrix (S4)			55101	13 (1 0)			Piedmont Floo	dplain	Soils ((F19) (MLRA 149B)
Sandy F	Redox (S5)							Mesic Spodic (1	7A6) (N	/LRA 1	44A, 145, 149B)
Strippe	d Matrix (S6)							Red Parent Ma	terial	(F21)	
Dark Si	urface (S7) (I RR R N	/I RA 140)B)					Very Shallow D	ark Su	irface	(TF12)
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					Other (Explain	in Rer	narks)	
³ Indicators	of hydrophytic veg	getation a	and wetland hydr	olog	y must be	e preser	it, unless disturbe	d or problematic.			
Restrictive	Layer (if observed)	:									
	Туре:	. <u> </u>	None			Hydric	Soil Present?	Ye	es	_ No _	✓
	Depth (inches):										
Remarks:											
No positive	indication of hydr	ic soils w	as observed. The	crite	erion for	hydric s	oil is not met.				

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 Project	t City/County:	Sprakers, Montg	omery County		Sampling Date: 20	021-Sept-09
Applicant/Owner: S	unEast			State: NY		Sampling Point: W-F	RDS-06_PEM-1
Investigator(s): Ryan	n Snow, Abi Lig	sht	Secti	on, Township, Ra	nge: N/	A	
Landform (hillslope, te	rrace, etc.):	Flat	Local relief (concave, convex,	none):	Undulating	Slope (%): 2 to 5
Subregion (LRR or MLR	RA): LRR	L	Lat:	42.8351493694	Long:	-74.4839499866	Datum: WGS84
Soil Map Unit Name:	Appleton Sili	t loam, 3 to 8 percent				NWI classificati	on: None
Are climatic/hydrologic	conditions or	n the site typical for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remarks	.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology significant or Hydrology naturally	tly disturbed? problematic?	Are "Normal C (If needed, exp	ircumst olain an <u>y</u>	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:	W-RDS-06					
Remarks: (Explain alternative procedures he	re 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 that apply)	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) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 	 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? Yes No _∠ Depth (inches):	_		
Water Table Present? Yes 🖌 No Depth (inches): 2	Wetland Hydrology Present? Yes No		
Saturation Present? Yes 🖌 No Depth (inches): 0			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), i Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was obse	f available: erved (primary and secondary indicators were present).		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-06_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
1 Phalaris arundinassa		Species:		Are OBL, FACW, or FAC:		3	(A)
1. Filadi is al ululi lacea				Total Number of Dominant Species			
2. <u>Typila latitulia</u>				Across All Strata:	I	3	(B)
S. Unoclea sensibilis				Percent of Dominant S	pecies That	100	(A (D)
4. <u>Carex Iunida</u>				Are OBL, FACW, or FAC	:	100	(A/B)
c		NO	FACVV	Prevalence Index works	sheet:		
o		·		Total % Cover	of:	<u>Multiply</u>	<u>By:</u>
/		- Total Cav		OBL species	45	x 1 =	45
Capling/Chrub Stratum (Dist size) 15 ft)	0	_ 10tal COV	er	FACW species	75	x 2 =	150
Sapiing/Shrub Stratum (Plot Size: 15 It)	15	Vac	EAC	FAC species	15	x 3 =	45
	15	res	FAC	FACU species	0	x 4 =	0
2.				UPL species	0	x 5 =	0
3				Column Totals	135	(A)	240 (B)
4.				Prevalence Ir	ndex = B/A =		
5	. <u> </u>			Hydrophytic Vegetation	Indicators:		
6				1- Rapid Test for H	Hvdrophytic V	/egetation	1
7				2 - Dominance Ter	st is >50%		
	15	= Total Cov	er	✓ 3 - Prevalence Ind	lex is $< 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	¹ (Provide	supporting
1. <i>Phalaris arundinacea</i>	55	Yes	FACW	data in Remarks or on	a separate sh	neet)	subber and
2. <i>Typha latifolia</i>	25	Yes	OBL	Problematic Hydr	ophytic Vege	tation ¹ (E>	(plain)
3. <i>Carex lurida</i>	20	No	OBL	¹ Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4. <i>Equisetum palustre</i>	10	No	FACW	present, unless disturb	ed or problei	matic	0,
5. <i>Onoclea sensibilis</i>	10	No	FACW	Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3 i	in. (7.6 cm) oı	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in. [OBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous ((non-woody)	plants, re	gardless of
11.		·		size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	dy vines great	ter than 3	.28 ft in
	120	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatio	n Present?	res 🟒 N	lo
1							
2		<u> </u>					
3							
·		·					
		- Total Car	or				
	0		ei	<u>]</u>			
Remarks: (Include photo numbers here or on a separat	e 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 Des	cription: (Describe	to the	depth needed to	docum	nent the i	indicato	r or confirm the al	osence of indicators.)
Depth	Matrix		Redox	Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 3	10YR 3/1	90	10YR 4/6	10	С	М	Clay Loan	n
3 - 18	10YR 4/1	95	10YR 4/6	5	С	М	Silty Clay	
					<u> </u>			
				—				
							<u> </u>	
¹ Type: C = C	Concentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue B	elow S	urface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		Thin Dark Si	urface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	istic (A3)		Loamy Mucl	ky Mir	ieral (F1)	(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	trix (F2)			Dark Surface (S7) (LRR K, L)
Stratine	d Balow Dark Surf:	مم (۸۱	1) / Pedex Dark	Surfa	-3) co (E6)			Polyvalue Below Surface (S8) (LRR K, L)
Depiete	ark Surface (A12)		Depleted Dark	ark Su	rface (FO)	`		Thin Dark Surface (S9) (LRR K, L)
Sandy N	Aucky Mineral (S1)		Bedox Depr	ession	is (F8)	,		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy G	Gleved Matrix (S4)			000101	15 (1 0)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	(54)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Strinner	d Matrix (S6)							Red Parent Material (F21)
Dark Su	urface (S7) (I PP P N	<i>Ι</i> Ι ΡΔ 1	/9B)					Very Shallow Dark Surface (TF12)
Durk Su			-50)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	Irolog	y must b	e preser	nt, unless disturbe	d or problematic.
Restrictive	Layer (if observed):							
	Туре:		None			Hydric	Soil Present?	Yes 🖌 No
	Depth (inches):							
Remarks:								
A positive i	ndication of hvdric	soil wa	as observed. The o	riterio	on for hv	dric soil	is met.	
	,				,			

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 So	lar Project	_City/County:,		Sampling Date: 202	21-Sept-09
Applicant/Owner: SunEa	ast		State:	Sampling Point: W-R	DS-06_PFO-1
Investigator(s): Ryan Sno	ow, Abi Light	Sect	tion, Township, Rang	e: NA	
Landform (hillslope, terrac	:e, etc.): Swamp	Local relief	(concave, convex, no	one): Convex	Slope (%): 0 to 1
Subregion (LRR or MLRA):	LRR R	Lat:	42.8366484472 L	ong: -74.4860610399	Datum: WGS84
Soil Map Unit Name:				NWI classificatio	n:
Are climatic/hydrologic cor	nditions on the site typica	al for this time of year?	Yes 🟒 No	(If no, explain in Remarks.)	
Are Vegetation, Soil Are Vegetation, Soil	I, or Hydrology _ I, or Hydrology _	significantly disturbed? naturally problematic?	Are "Normal Circ (If needed, expla	cumstances" 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-RDS-06
Remarks: (Explain alternative procedure	es here or in a separate repo	prt)	
Covertype is PFO. Area is wetland, all th	ree 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)
 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 Sparsely Vegetated Concave 	Water Aquat Marl I Hydro Oxidiz Preser Recen Thin N Imagery (B7) Other e Surface (B8)	r-Stained Leaves (B9) cic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) zed Rhizospheres on Living nce of Reduced Iron (C4) it Iron Reduction in Tilled S Auck Surface (C7) (Explain in Remarks)	Roots (C3) oils (C6)	 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?	Yes 🟒 No	Depth (inches):	1	_
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 (strear Remarks: The criterion for wetland hydro	n gauge, monitoring well, a	aerial photos, previous insp	v was obser	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-06_PFO-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant	Indicator Status	Dominance Test works	sheet: Species That		
1 Retula alleghaniensis	55	Yes	FAC	Are OBL, FACW, or FAC	:	3	(A)
2. Tsuga canadensis	25	Yes	FACU	Total Number of Domi	inant Species	4	(D)
3. Ostrva virginiana	10	 No	FACU	Across All Strata:		4	(D)
4.				 Percent of Dominant S Are OBL, FACW, or FAC 	Species That	75	(A/B)
5		·		Prevalence Index work	(sheet:		
b		·		- <u>Total % Cover</u>	r of:	<u>Multiply</u>	<u>' By:</u>
7		Tabal Ca		- OBL species	0	x 1 =	0
	90	= lotal Cov	er	FACW species	70	x 2 =	140
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	55	x 3 =	165
1				- FACU species	35	x 4 =	140
2.				– UPL species	0	x 5 =	0
3				Column Totals	160	(A)	445 (B)
4				Prevalence I	ndex = B/A =	2.8	
5				Hydrophytic Vegetatio	n Indicators:		
6				- 1- Rapid Test for	Hydrophytic \	/egetation	n
7				- <u> </u>	\sim st is >50%	egetation	
	0	= Total Cov	er	4 3 - Prevalence Inc.	dev is $< 3.0^{1}$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica	Adaptations	1 (Provide	supporting
1. Osmundastrum cinnamomeum	50	Yes	FACW	- data in Remarks or on	a separate sh	neet)	Supporting
2. <i>Onoclea sensibilis</i>	15	Yes	FACW	Problematic Hvd	rophytic Vege	tation ¹ (E	xplain)
3. <i>Dryopteris carthusiana</i>	5	No	FACW	¹ Indicators of hydric so	oil and wetlan	d hvdrold	ogy must be
4				present, unless distur	bed or proble	matic	0,
5.				Definitions of Vegetati	on Strata:		
6.				Tree – Woody plants 3	in. (7.6 cm) oi	r more in	diameter at
7.				breast height (DBH), re	egardless of h	eight.	
8.		·		Sapling/shrub - Wood	y plants less t	han 3 in.	DBH and
9.				greater than or equal	to 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11.				size, and woody plants	s less than 3.2	8 ft tall.	
12.				Woody vines – All woo	dy vines grea	ter than 3	8.28 ft in
	70	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatio	on Present?	Yes 🟒 I	No
1.							
2				-			
2		·		-			
A		·		-			
-+	0	= Total Cov	er	-			
Remarks: (Include photo numbers here or on a sep	barate sheet.)	N/ of domin	antenacios	indexed as ORL FACIAL		المعالمة المعالمة	

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	to the o	depth 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 ¹	Loc ²	Texture	Remarks
0 - 4	10YR 2/2	95	10YR 4/6	5	С	М	Silty Clay	
4 - 20	N 3/	92	2.5Y 4/4	5	С	М	Clay	
					·			<u> </u>
						<u> </u>		
Type: C = C	Concentration, D = I	Depleti	ion, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
lydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow S	Surface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K. L. MI RA 149B)
Histic E	oipedon (A2)		Thin Dark Su	irface	e (S9) (LRF	R R, MLR	A 149B)	Coast Prairie Redox (A16) (I RR K R)
Black H	istic (A3)		Loamy Muck	y Mir	neral (F1)	(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (I RR K R)
_∕ Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	atrix (F2)			Dark Surface (S7) (I RR K L)
Stratifie	d Layers (A5)		Depleted Ma	atrix (F3)			Polyvalue Below Surface (S8) (I RR K 1)
Deplete	d Below Dark Surfa	ace (A1	1) Redox Dark	Surfa	ce (F6)			Thin Dark Surface (S9) (LRK I)
Thick Da	ark Surface (A12)		Depleted Da	rk Su	rface (F7)		Iron-Manganese Masses (E12) (I RR K R)
Sandy N	/lucky Mineral (S1)		Redox Depre	essior	าร (F8)			Piedmont Eloodplain Soils (E19) (MI RA 149B)
Sandy C	Gleyed Matrix (S4)							Mesic Spodic (TA6) (MI RA 144A 145 149B)
Sandy F	Redox (S5)							Red Parent Material (F21)
Strippe	d Matrix (S6)							Very Shallow Dark Surface (TE12)
Dark Su	irface (S7) (LRR R, N	ILRA 14	49B)					Other (Explain in Remarks)
Indicators	of hydrophytic veg	etatior	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	d or problematic.
Restrictive	Layer (if observed):							
	Туре:		None	_		Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
A positive i	ndication of hydric	soil wa	is observed. The c	riteri	on for hy	dric soil	is met.	

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/Co	unty: Sprakers, Montg	omery County		Sampling Date: 2	2021-Sept-09
Applicant/Owner: S	unEast			State: NY		Sampling Point: W-	RDS-06_UPL-1
Investigator(s): Ryar	n Snow, Abi Lig	;ht	Sect	ion, Township, Ra	nge: NA	Ą	
Landform (hillslope, te	rrace, etc.):	Flat	Local relief	(concave, convex,	none):	Undulating	Slope (%): 2 to 5
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.8351440481	Long:	-74.4843975682	Datum: WGS84
Soil Map Unit Name:	Appleton silt	t loam, 3 to 8 percent slo	opes			NWI classificat	ti on: None
Are climatic/hydrologic	c conditions o	n the site typical for this	time of year?	Yes 🟒 No 🔄	(If no	, explain in Remark	s.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sign or Hydrology natu	ificantly disturbed? Irally problematic?	Are "Normal C (If needed, exp	ircumst plain an	ances" present? y answers in Remar	Yes _ 🖌 No ks.)

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	re 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 or	ne is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)
 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 Surface 	Water Aquat Marl I Oxidiz Preser Recen Thin M agery (B7) Other Irface (B8)	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) red Rhizospheres on Living Roc nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils Auck Surface (C7) (Explain in Remarks)	ots (C3) (C6)	 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?	Yes No 🟒	Depth (inches):		
Water Table Present?	Yes No	Depth (inches):		Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches):	12	
(includes capillary fringe)				
Describe Recorded Data (stream g Remarks: The criterion for wetland hydrolog	auge, monitoring well, a	aerial photos, previous inspect	ions), if	available:
	,			, , , , , , , , , , , , , , , , , , ,

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-06_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksh	neet:		
	% Cover	Species?	Status	Are OBL_EACW_or_EAC	pecies That	0	(A)
l				Total Number of Domin	ant Species		
2				Across All Strata:		2	(B)
A		<u> </u>		Percent of Dominant Sp	oecies That	0	(A/P)
4		<u> </u>		Are OBL, FACW, or FAC:		0	(AV D)
6		<u> </u>		Prevalence Index works	heet:		
7				Total % Cover	<u>of:</u>	<u>Multiply</u>	<u>' By:</u>
···	0	= Total Cove	or	OBL species	0	x 1 =	0
Sanling/Shruh Stratum (Plot size: 15 ft)			-1	FACW species	0	x 2 =	0
<u>- aphiligrani do attatum</u> (Flot size. <u>13 it</u>)				FAC species	0	x 3 =	0
·		<u> </u>		FACU species	95	x 4 =	380
2.		<u> </u>		UPL species	25	x 5 =	125
3		<u> </u>		Column Totals	120	(A)	505 (B)
4				Prevalence In	dex = B/A =	4.2	
5				Hydrophytic Vegetation	Indicators:		
b		<u> </u>		1- Rapid Test for H	lydrophytic V	egetatior	r
7				2 - Dominance Tes	st is > 50%	-	
	0	= lotal Cove	er	3 - Prevalence Inde	ex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations ¹	(Provide	supporting
1. <u>Galium mollugo</u>	55	Yes	FACU	data in Remarks or on a	a separate sh	eet)	
2. <u>Solidago altissima</u>	35	Yes	FACU	Problematic Hydro	ophytic Vege	tation ¹ (E	xplain)
3. <u>Daucus carota</u>	15	No	UPL	¹ Indicators of hydric soi	l and wetlan	d hydrolc	ogy must be
4. <u>Cirsium discolor</u>	10	No	UPL	present, unless disturbe	ed or probler	natic	
5. <i>Taraxacum officinale</i>	5	No	FACU	Definitions of Vegetatio	n Strata:		
6		<u> </u>		Tree – Woody plants 3 in	n. (7.6 cm) or	more in	diameter at
7		<u> </u>		breast height (DBH), reg	gardless of h	eight.	
8				Sapling/shrub – Woody	plants less tl	han 3 in.	DBH and
9				greater than or equal to	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous (non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	20.6
12		<u> </u>		Woody vines – All wood	y vines great	er than 3	5.28 ft in
	120	= Total Cove	er	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	n Present?	/es I	No 🔽
1							
2.							
3.							
4.							
	0	= Total Cove	er				
		_		<u></u>			
Remarks: (Include photo numbers here or on a separate	e sneet.)						
No positive indication of hydrophytic vegetation was ob	served (≥	50% of dom	inant specie	es indexed as FAC- or drie	er).		

SOIL

(inches) Color (moist) % Color (moist) % Type! Loc2 Texture 0 - 6 10YR 4/1 100	Remarks
0 - 6 10YR 4/1 100 Gravelly Silty Clay Loam 6 - 18 10YR 4/1 95 10YR 4/6 5 C M Silty Clay 9 10YR 4/1 95 10YR 4/6 5 C M Silty Clay 9 10YR 4/1 95 10YR 4/6 5 C M Silty Clay 9 9 10YR 4/6 5 C M Silty Clay 9 9 9 10YR 4/6 5 C M Silty Clay 9 9 9 10YR 4/6 5 C M Silty Clay 9 9 9 10YR 4/6 5 C M Silty Clay 9 9 9 10YR 4/6 5 C M Silty Clay 9 9 9 10YR 4/6 5 C M Silty Clay 9 9 10YR 4/6 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	Lining, M = Matrix. >blematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
6 - 18 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 6 - 18 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 6 - 18 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 9 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 9 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 9 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 9 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 9 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 9 10YR 4/1 95 10YR 4/6 5 C M Sility Clay 9 10YR 4/6 1 10YR 4/6 1 Sility Clay 10YR 4/6 9 10YR 4/6 1 10YR 4/6 1 10YR 4/6 10YR 4/6 10YR 4/6 10YR 4/6 10YR 4/6	Lining, M = Matrix. >blematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
Solid Tork Nr. Solid Tork Nr. Solid Einstein Solid Tork Nr. Solid Einstein Einstein Solid Solid Einstein Einstein Einstein Solid Solid Einstein Einstein Einstein Solid Solid Fork Nr. Solid Solid Einstein Solid Solid Fork Nr. Solid Einstein	Lining, M = Matrix. >blematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ydric Soil Indicators: Indicators for Problematic Hy Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, I) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (F6)	Lining, M = Matrix. >blematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ydric Soil Indicators: Indicators for Problematic H Histosol (A1)	Lining, M = Matrix. 2010 (LRR K, L, MLRA 149B)
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ydric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, I) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, I) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Surface (S7) (LRR K, I)) Stratified Layers (A5) ✓ Depleted Matrix (F3) Polyvalue Below Surface (S7) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LR K, I) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soil Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA Stripped Matrix (S6) Wery Shallow Dark Surface Very Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark Mictators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Lining, M = Matrix. blematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ydric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, I) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) V Depleted Matrix (F3) Polyvalue Below Surface (S7) (LRR K, Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LF Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses Sandy Redox (S5) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface Very Shallow Dark Surface Dark Surface (S7) (LRR M, MLRA 149B) Other (Explain in Remark Metrial (F21) Very Shallow Dark Surface Sandy Redox (S5) Other (Explain in Remark Metrial (F21) Very Shallow Dark Surface Other (Explain in Remark Metrial (F21) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark Metrial (F21)	Lining, M = Matrix. blematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N yndric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, I Histosol (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide Layers (A5) 2 Depleted Matrix (F3) Dark Surface (S7) (LRR K, Surface (S7) (LRR K, Surface (A11)) Redox Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (S9) (LIR Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA Mesic Spodic (TA6) (MLRA Sandy Redox (S5) Very Shallow Dark Surface Very Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark Meticators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Thirdicator (Irophytic Vegetation and wetland hydrology must be present, unless disturbed or problematic.	Lining, M = Matrix. blematic Hydric Soils ³ : 10) (LRR K, L, MLRA 149B)
/pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N /dric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Dark Surface (S7) (LRR K, Stratified Layers (A5) ✓ Depleted Matrix (F3) Dark Surface (S7) (LRR K, Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S7) (LRR K, Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soil Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA Stripped Matrix (S6) Very Shallow Dark Surface (S7) (LRR K, Matrial (F21) Very Shallow Dark Surface (S7) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Lining, M = Matrix. oblematic Hydric Soils ³ : 10) (LRR K, L, MLRA 149B)
rpe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = M dric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, I) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) ✓ Depleted Matrix (F3) Polyvalue Below Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soil Sandy Redox (S5) Mesic Spodic (TA6) (MLRA Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface Very Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remark	Lining, M = Matrix. oblematic Hydric Soils ³ :
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N rdric Soil Indicators: Indicators for Problematic Hy Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) ✓ Depleted Matrix (F3) Polyvalue Below Surface (F6) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LR Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soil Sandy Redox (S5) Stripped Matrix (S6) Wery Shallow Dark Surface Very Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remark	Lining, M = Matrix. oblematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N yrdic Soil Indicators: Indicators for Problematic Hy	Lining, M = Matrix. oblematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = N Histosol (A1)	Lining, M = Matrix. oblematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
rpe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 2Location: PL = Pore Lining, M = N rdric Soil Indicators: Indicators for Problematic Hi 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) Opeleted 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) Mesic Spodic (TA6) (MLRA Mesic Spodic (TA6) Wery Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remark	Lining, M = Matrix. oblematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
rdric Soil Indicators: Indicators for Problematic Hy - Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ 2 cm Muck (A10) (LRR K, H) - Histic Epipedon (A2) _ Thin Dark Surface (S9) (LRR R, MLRA 149B) _ Coast Prairie Redox (A16) _ Black Histic (A3) _ Loamy Mucky Mineral (F1) (LRR K, L) _ Coast Prairie Redox (A16) _ Hydrogen Sulfide (A4) _ Loamy Gleyed Matrix (F2) _ Dark Surface (S7) (LRR K, _ Stratified Layers (A5) - Depleted Matrix (F3) _ Depleted Dark Surface (F6) _ Thic Dark Surface (A11) Redox Dark Surface (F6) _ Thin Dark Surface (S9) (LR _ Thick Dark Surface (A12) _ Depleted Dark Surface (F7) _ Iron-Manganese Masses _ Sandy Mucky Mineral (S1) _ Redox Depressions (F8) _ Piedmont Floodplain Soil _ Sandy Redox (S5) _ Stripped Matrix (S6) _ Mesic Spodic (TA6) (MLR# _ Dark Surface (S7) (LRR R, MLRA 149B) _ Other (Explain in Remark dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. _ Other (Explain in Remark	oblematic Hydric Soils ³ : (10) (LRR K, L, MLRA 149B)
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, I Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) ✓ Depleted Matrix (F3) Dark Surface (S7) (LRR K, Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LR Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soil Sandy Redox (S5) Stripped Matrix (S6) Wery Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface Other (Explain in Remark surface) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remark surface)	(10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	
	Redox (A16) (LRR K, L, R)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) ✓ Depleted Matrix (F3) Polyvalue Below Surface Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LR Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soil Sandy Redox (S5) Mesic Spodic (TA6) (MLR4 Stripped Matrix (S6) Very Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remark	Peat or Peat (S3) (LRR K, L, R)
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface	(S7) (LRR K, L)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LF Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soil Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLR4 Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. or problematic.	low Surface (S8) (LRR K, L)
Inick Dark Surface (172)	rface (S9) (LRR K, L)
Piedmont Floodplain Soil Piedmont Floodplain Soil Nesic Spodic (TA6) (MLR4 Nes	ese Masses (F12) (LRR K, L, R)
	odplain Soils (F19) (MLRA 149B)
Sandy Redox (35) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) midicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Laver (if observed):	(TA6) (MLRA 144A, 145, 149B)
Very Shallow Dark Surface Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	laterial (F21)
Other (Explain in Remark Other (Explain in Remark Other (Explain in Remark estrictive Laver (if observed):	Dark Surface (TF12)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	n in Remarks)
estrictive Laver (if observed):	
Type: None Hydric Soil Present? Yes	Yes 🟒 No
Depth (inches):	

Vegetation Photos



Soil Photos

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Project	<u>c</u>	ity/County: Sprakers, I	Montg	omery		Sampling Date:	2021-Sept-09	
Applicant/Owner: S	unEast				State: NY		Sampling Point: <u>V</u>	V-RDS-06_UPL-2	
Investigator(s): Ryar	n Snow, Abi Lig	ht		Sect	ion, Township, Ra	nge: N	٩		
Landform (hillslope, te	rrace, etc.):	Flat	Local	relief	(concave, convex,	none):	Undulating	Slope (%):	2 to 5
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8367417918	Long:	-74.4861299246	Datum: W	GS84
Soil Map Unit Name:	Darien silt lo	am, DaB					NWI classifica	ation: None	
Are climatic/hydrologic	c conditions or	n the site typical fo	or this time of year?		Yes 🟒 No 🔄	(If no	, explain in Remar	ks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	_ significantly disturbe _ naturally problematio	d? c?	Are "Normal ((If needed, ex	Circumst plain an	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 he	ere or in a separate report	t)	
Covertype is UPL. Area is upland, not all thr	ee wetland parameters ar	e present.	

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	<u>e is required; check all t</u>	hat apply)	Secondary Indicators (minimum	<u>of two required)</u>
		Stained Leaves (B9) : Fauna (B13) eposits (B15) en 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)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial In Stunted or Stressed Plants (D Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	nagery (C9) 1)
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
Describe Recorded Data (stream ga	auge, monitoring well, a	erial photos, previous inspections), if	available:	
Remarks:				
No positive indication of wetland hy	ydrology was observed.			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-06_UPL-2

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test workshe	et:		
	% Cover	Species?	Status	Number of Dominant Spe	ecies That	1	(A)
1. Fagus grandifolia	50	Yes	FACU	Are OBL, FACW, or FAC:			
2. <i>Tsuga canadensis</i>	25	Yes	FACU	Iotal Number of Domina	nt Species	4	(B)
3. <u>Acer saccharum</u>	10	No	FACU	Across All Strata:	dia a Thuas		
4				Percent of Dominant Spe	cies i nat	25	(A/B)
5				Are OBL, FACW, OF FAC.	a a ti		
6.				Tatal % Cause of	eet.	Maria Internet	D. a
7.				<u>Iotal % Cover oi</u>	<u>.</u>		<u>ву:</u>
	85	= Total Cov	er			× I –	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	20	× 2 = -	40
1. 1.				FAC species	5	x 3 = _	15
2				FACU species	95	x 4 =	380
				UPL species	0	x 5 =	0
				Column Totals	120	(A)	435 (B)
		<u> </u>		Prevalence Inde	ex = B/A =	3.6	
s		<u> </u>		Hydrophytic Vegetation I	ndicators:		
o		<u> </u>		1- Rapid Test for Hy	drophytic V	/egetatior	ı
/				2 - Dominance Test	is > 50%		
	0	= lotal Cov	er	3 - Prevalence Inde>	is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological A	daptations	(Provide	supporting
1. <i>Dryopteris carthusiana</i>	20	Yes	FACW	data in Remarks or on a s	separate sh	leet)	
2. Acer saccharum	10	Yes	FACU	Problematic Hydrop	hytic Vege	tation ¹ (E>	(plain)
3. Acer rubrum	5	No	FAC	¹ Indicators of hydric soil a	and wetlan	d hydrolo	gy must be
4				present, unless disturbed	l or problei	matic	
5				Definitions of Vegetation	Strata:		
6				Tree – Woody plants 3 in.	(7.6 cm) or	r more in	diameter at
7.				breast height (DBH), rega	rdless of h	eight.	
8.				Sapling/shrub - Woody p	lants less t	han 3 in. I	OBH and
9.				greater than or equal to 3	3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (no	on-woody)	plants, re	gardless of
11.				size, and woody plants le	ss than 3.2	8 ft tall.	
12				Woody vines - All woody	vines great	ter than 3	.28 ft in
	35	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetation	Present?	/es N	No 🖌
1							
2		<u> </u>		•			
2				•			
5							
4							
	0	= lotal Cov	er				
Remarks: (Include photo numbers here or on a separate	sheet.)						
No positive indication of hydrophytic vegetation was ob-	served (≥	50% of dom	inant specie	es indexed as FAC– or drier).		

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
Depth	Matrix		Redox	Feat	ures							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ire	Remarks			
0 - 2	10YR 3/2	100					Silt Lo	am				
2 - 8	10YR 5/8	100					Loamy	Sand				
8 - 20	10YR 4/4	100		_			Loamy S	Sand				
-				_								
_				_								
				—		·						
				—								
						·						
-				—								
-												
¹ Type: C = C	Concentration, D =	Depletic	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore	Lining, M = Matrix.			
Hydric Soil	Indicators:							Indicators for Pr	oblematic Hydric Soils ³ :			
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (#	A10) (LRR K, L, MLRA 149B)			
Histic Ep	oipedon (A2)		Thin Dark Sur	face	(S9) (LRF	R R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)				
Black Hi	stic (A3)		Loamy Mucky	Mir	eral (F1)	(LRR K,	L)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)			
Hydroge	en Sulfide (A4)		Loamy Gleyed	d Ma	trix (F2)			Dark Surface	e (S7) (LRR K, L)			
Stratifie	d Layers (A5)		Depleted Mat	rix (I	-3)			Polyvalue Below Surface (S8) (LRR K, L)				
Depiete	d Below Dark Surf	ace (ATT) Redox Dark S	urta	ce (F6)	、 、		Thin Dark Su	ırface (S9) (LRR K, L)			
Thick Da	Ark Surface (ATZ)		Depieted Dar	k Su	riace (F7)		Iron-Manganese Masses (F12) (LRR K, L, R)				
			Redox Depres	SIO	IS (F8)			Piedmont Flo	oodplain Soils (F19) (MLRA 149B)			
Sandy G	leyed Matrix (S4)							Mesic Spodio	c (TA6) (MLRA 144A, 145, 149B)			
Sandy R	edox (S5)							Red Parent N	Material (F21)			
Stripped	d Matrix (S6)							Very Shallow	/ Dark Surface (TF12)			
Dark Su	rface (S7) (LRR R, N	/LRA 149	9B)					Other (Expla	in in Remarks)			
³ Indicators	of hydrophytic veg	etation	and wetland hydr	olog	y must b	e preser	nt, unless disturbe	ed or problematic.				
Restrictive I	layer (if observed)					ľ		•				
	Type:		None			Hvdric	Soil Present?	Ye	s No ✓			
	Denth (inches)											
Pomarks:	Deptil (menes).							<u>_</u>				
No positive	indication of hydr	ic soils w	as observed. The	crite	erion for	hydric s	oil is not met.					
	j					,						

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			unty: Sprakers, Montg	omery		Sampling Date: 2021-Sept-09			
Applicant/Owner: SunEast			State: NY			Sampling Point: W-RDS-09_PFO-1			
Investigator(s): Ryar	n Snow, Abi Lig	nge: NA	٨						
Landform (hillslope, te	rrace, etc.):	Flood Plain	Local relief	(concave, convex,	, none):	Concave	Slope (%): 0 to 1		
Subregion (LRR or MLF	RA): LRR I	-	Lat:	42.8390237693	Long:	-74.4893858254	Datum: WGS84		
Soil Map Unit Name:	Darien silt lo	am, 3 to 8 percent slope	S			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,	Soil, Soil,	or Hydrology signi or Hydrology natu	ficantly disturbed? rally problematic?	Are "Normal ((If needed, ex	Circumst plain any	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:	W-RDS-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 o	of one is required; check all	Secondary Indicators (minimum of two required)				
 Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 			toots (C3) ils (C6)	 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 (strea	Yes No _∠ Yes No _∠ Yes _∠_ No m gauge, monitoring well, a	Depth (inches): Depth (inches): Depth (inches): aerial photos, previous inspe	4	Wetland Hydrology Present? Yes _∠_ No available:		
Remarks: The criterion for wetland hydro	ology is met. A positive indic	cation of wetland hydrology	was obse	rved (primary and secondary indicators were present		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-09_PFO-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:			
	% Cover	Species?	Status	Number of Dominant Species Tha		4	(A)
1. Betula alleghaniensis	60	Yes	FAC	Are OBL, FACW, or FAC:			
2. <i>Ulmus americana</i>	25	Yes	FACW	Total Number of Domi	nant Species	5	(B)
3. Ostrya virginiana	15	No	FACU	Across All Strata:			
4.				Percent of Dominant Species That Are OBL, FACW, or FAC:		80	(A/B)
5				Prevalence Index worksheet:			
6				- Total % Cover of:		Multiply By:	
7				OBL species	0	x 1 =	0
	100	= Total Cov	er	FACW species	40	x 2 =	80
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	60	x 3 =	180
1. Ostrya virginiana	10	Yes	FACU	FACU species	25	x 4 =	100
2					0	x 5 =	0
3				Column Totals	125	(A)	360 (B)
4				Brovalanca k	123	20	300 (B)
5.				Frevalence in	iuex – D/A –	2.9	·
6.				Hydrophytic Vegetation	n Indicators:		
7.		·		1- Rapid Test for l	Hydrophytic \	egetatior/	ו
	10	= Total Cov	er	\sim 2 - Dominance Test is >50%			
Herb Stratum (Plot size: 5 ft)	\checkmark 3 - Prevalence Index is $\leq 3.0^1$						
1. Impatiens capensis	10	Yes	FACW	4 - Morphological Adaptations ¹ (Provide supporting			
2 Onoclea sensibilis	5	Ves	FACW	data in Remarks or on a separate sheet)			
2. <u>Onocica scrisibilis</u>		105	17/07/	Problematic Hydi	ophytic Vege	tation ¹ (Ex	xplain)
5				¹ Indicators of hydric so	il and wetlan	d hydrolo	ogy must be
4		·		present, unless disturb	ed or proble	matic	
5.				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) oi	r more in	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub – Woody plants less than 3 in. DBH and			DBH and
9				greater than or equal t	:o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous (non-woody) plants, regardless			gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	_
12.				Woody vines – All woo	dy vines grea	ter than 3	8.28 ft in
	15	= Total Cover		neight.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatic	on Present?	res 🟒 🛚 🖌	No
1.							
2.							
3		·					
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a senar	ate 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

Depth	Matrix		Redox	Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹		Texture	Remarks
0 5	10VP 3/1	05	10VP 4/6	5	<u> </u>		Clay	
E 10	1010 3/1		1010 4/6	25			Clay	
5 - 16	1018 3/1	/5	1018 4/0	25		IVI	Clay	
				· —				
				·				
/pe: C = C	oncentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ²	Location: PL = Pore Lining, M = Matrix.
dric Soil I	ndicators:							Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow S	Surface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (I PP K I MI PA 140P)
_ Histic Er	pipedon (A2)		Thin Dark Si	urface	(S9) (LRF	R, MLR	A 149B)	Coast Drairie Dodox (A16) (LDD K L D)
_Black Hi	stic (A3)		Loamy Mucl	ky Mir	neral (F1)	(LRR K, I	L)	5 cm Muchy Peat or Poat (S2) (I DD K / D)
_ Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	trix (F2)			Dark Surface (S7) (I PR K 1)
Stratifie	d Layers (A5)		Depleted Ma	atrix (F3)			Polyvalue Below Surface (S8) (LRR K 1)
Deplete	d Below Dark Surfa	ace (A1	1) Redox Dark	Surfa	ce (F6)			Thin Dark Surface (S9) (LPR K 1)
Thick Da	ark Surface (A12)		Depleted Da	ark Su	rface (F7)		Iron-Manganese Masses (E12) (I PP K P)
_Sandy N	lucky Mineral (S1)		Redox Depr	essior	าร (F8)			Piedmont Eloodplain Soils (E19) (MI PA 1/98)
_ Sandy G	ileyed Matrix (S4)							Pleamont Plotoplain Solis (PT9) (MERA 1490) Masic Spadic (TA6) (MERA 1440, 145, 1498)
_ Sandy R	edox (S5)							Red Parent Material (E21)
_ Stripped	l Matrix (S6)							Very Shallow Dark Surface (TE12)
_ Dark Su	rface (S7) (LRR R, M	ILRA 14	49B)					Other (Explain in Remarks)
	- f h						t	
dicators		etatior	h and wetland hyd	irolog	y must b	e preser	nt, unless disturb	ed or problematic.
estrictive l	.ayer (if observed): 							
	Type:		None			Hydric	Soil Present?	Yes 📝 No
	Depth (inches):							
JUSILIVE II		5011 W2	is Observed. The				is met.	

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	ek Solar Project	t City/Count	y: Sprakers, Montg	omery	Sampling Date:	Sampling Date: 2021-Sept-09				
Applicant/Owner: S	unEast			State: NY	Sampling Point:	Sampling Point: W-RDS-09_UPL-1				
Investigator(s): Rya	n Snow, Abi Lig	ght	Section, Township, Range: NA							
Landform (hillslope, te	errace, etc.):	Hillslope	Local relief (concave, convex	, none): Convex	Slope (%): 20 to 25				
Subregion (LRR or MLI	RA): LRR I	L	Lat:	42.8389707098	Long: -74.4894761421	Datum: WGS84				
Soil Map Unit Name:	Darien silt lo	oam, 3 to 8 percent slopes			NWI classific	ation: None				
Are climatic/hydrologi	c conditions or	n the site typical for this tim	ie of year?	Yes 🟒 No 🔄	(If no, explain in Rema	rks.)				
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology signification or Hydrology naturall	antly disturbed? ly problematic?	Are "Normal ((If needed, ex	Circumstances" present? plain any 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:									
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 one	is required; check all th	at apply)	Secondary Indicators (minimum of two required)			
 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 Surf 	Water-St Aquatic Marl Dej Hydroge Oxidizec Presenco Recent lu Thin Mu gery (B7) Other (E face (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	agery (C9))			
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 _		
Describe Recorded Data (stream gau	Jge, monitoring well, aer	rial photos, previous inspections), if	available:			
Remarks: The criterion for wetland hydrology	is not met. No positive ir	ndication of wetland hydrology was	observed.			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-09_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksh	eet:		
	% Cover	Species?	Status	Number of Dominant Sp	oecies That	1	(A)
1. <i>Tsuga canadensis</i>	60	Yes	FACU	Are OBL, FACW, or FAC:			
2. <u>Acer saccharum</u>	20	Yes	FACU	Total Number of Domina	ant Species	4	(B)
3. Fagus grandifolia	10	No	FACU	Across All Strata:	' T h		
4				Percent of Dominant Sp	ecies That	25	(A/B)
5				Are OBL, FACW, OF FAC.	a a a t		
6.				Total % Cover a	ieet.	Multiply	D. a
7.					<u>n.</u>		<u>ру.</u> О
	90	= Total Cov	er		5	× 1 = _	10
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FACW species	5	× 2	10
1.				FAC species	0	x 3 = _	0
2.				FACU species	95	x 4 =	380
3.		·		UPL species	0	x 5 = _	0
4.				Column Totals	100	(A) _	390 (B)
5				Prevalence Inc	dex = B/A =	3.9	
6				Hydrophytic Vegetation	Indicators:		
7				1- Rapid Test for Hy	ydrophytic V	egetation/	1
/·		- Total Cov	or	2 - Dominance Test	t is > 50%		
Llorb Stratum (Diot size) Eft	0		-	3 - Prevalence Inde	$x is \le 3.0^1$		
<u>Herb Stratum</u> (Plot Size. <u>311</u>)	F	Vec		4 - Morphological A	Adaptations ¹	(Provide	supporting
		Vee		data in Remarks or on a	separate sh	leet)	
	5	res	FACU	Problematic Hydro	phytic Vege	tation ¹ (E>	(plain)
3				¹ Indicators of hydric soil	and wetlan	d hydrolo	gy must be
4.				present, unless disturbe	d or probler	matic	
5		<u> </u>		Definitions of Vegetation	n Strata:		
6				Tree – Woody plants 3 in	ı. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), reg	ardless of h	eight.	
8				Sapling/shrub – Woody	olants less tl	han 3 in. [OBH and
9				greater than or equal to	3.28 ft (1 m) tall.	
10				Herb – All herbaceous (r	ion-woody)	plants, reg	gardless of
11				size, and woody plants in	ess than 3.2	8 ft tall.	20.6
12				woody vines - All woody	/ vines great	ter than 3	.28 ft in
	10	= Total Cov	er	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	Present?	/es N	lo _
1.							
2.							
3.							
4.							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separate	e sheet.)				,		
No positive indication of hydrophytic vegetation was ob	served (≥	50% of dom	inant specie	es indexed as FAC– or drie	r).		

SOIL

Profile Desc	ription: (Describe	to the d	epth needed to de	ocum	nent the i	indicato	r or confirm the al	bsence of indicator	5.)		
Depth	Matrix		Redox	Feat	tures						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure			Remarks
0 - 5	10YR 3/4	100					Silt L	oam			
5 - 18	10YR 5/3	100					Silty Cla	iy Loam			
	-			_							
								·			
				—							
				—							
¹ Type: C = C	oncentration, D =	Depletic	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore L	ining,	M = Ma	atrix.
Hydric Soil I	ndicators:							Indicators for Pro	blema	tic Hyd	ric Soils ³ :
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A	0) (LR	R K. L. I	MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Sur	face	(S9) (LRF	R, MLR	A 149B)	Coast Prairie	Redox	(A16) (I	RRK.I.R)
Black Hi	stic (A3)		Loamy Mucky	/ Min	ieral (F1)	(LRR K,	L)	5 cm Mucky P	eat or	Peat (S	(I RR K. I. R)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface	S7) (LF	R K. L)	-, (, -,,
Stratifie	d Layers (A5)		Depleted Mat	rix (I	-3)			Polvvalue Bel	w Sur	face (S	8) (LRR K. L)
Deplete	d Below Dark Surf	ace (A11) Redox Dark S	urfa	ce (F6)			Thin Dark Sur	face (S	9) (LRR	K. L)
Thick Da	ark Surface (A12)		Depleted Dar	k Su	rface (F7))		Iron-Mangane	se Ma	sses (F	12) (LRR K. L. R)
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			Piedmont Flor	odolair	n Soils ((F19) (MI RA 149B)
Sandy G	leyed Matrix (S4)							Mesic Spodic	TA6) (I	MIRA 1	44A 145 149B)
Sandy R	edox (S5)							Red Parent M	aterial	(F21)	
Stripped	l Matrix (S6)							Very Shallow	Jark Si	(121) Irface	(TE12)
Dark Su	rface (S7) (LRR R, N	MLRA 14	9B)					Other (Explain		marke)	(1112)
									i i i i i i i i i i i i i i i i i i i	nai K3)	
³ Indicators	of hydrophytic veg	getation	and wetland hydr	olog	y must b	e preser	nt, unless disturbe	d or problematic.			
Restrictive L	ayer (if observed)	:									
	Туре:		None			Hydric	Soil Present?		/es	_ No _	✓
	Depth (inches):										
Remarks:											
No positive	indication of hydr	ic soils w	as observed. The	crite	erion for	hydric s	oil is not met.				
	,					5					

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	Sprakers, Montg	omery County		Sampling Date: 2021-Sept-09			
Applicant/Owner: S	unEast			State: NY		Sampling Point: W-RDS-10_PEM-1			
Investigator(s):Ryan Snow, Abi Light Section, Township, Range:NA									
Landform (hillslope, te	rrace, etc.):	Flat	Local relief	(concave, convex,	none):	Concave	Slope (%):	1 to 3	
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.8361236475	Long:	-74.4887160917	Datum: WO	SS84	
Soil Map Unit Name:	Lansing silt l	oam, 3 to 8 percent slopes				NWI classificatio	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,	Soil 🟒,	or Hydrology significar	ntly disturbed?	Are "Normal C	ircumst	ances" present?	Yes No	✓	
Are vegetation,	5011,	or Hydrology haturally	proplematic?	(ii needed, ex	biain an	y answers in Remarks	5.)		

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-RDS-10								
Remarks: (Explain alternative procedures here or in a separate report)											
Covertype is PEM. Area is wetland, all three wetland parameters are present. Circumstances are not normal due to agricultural activities.											

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of o	ne is required; check all t	that apply)	Secondary Indicators (minimum of two required)			
 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 Im Sparsely Vegetated Concave Summer Sparsely Vegetated Concave Summer Sparsely Vegetated Concave Summer Summe	Water- Aquati Marl D Hydrog Oxidize Preser Recent Thin M nagery (B7) Other of urface (B8)	 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?	Yes No 🟒	Depth (inches):				
Water Table Present?	Yes 🟒 No	Depth (inches): 5	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	gauge, monitoring well, a	erial photos, previous inspections), ation of wetland hydrology was obs	if available: served (primary and secondary indicators were present			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-10_PEM-1

	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>Iree Stratum</u> (Plot size: <u>30 ft</u>)	% Cover	Species?	Status	Number of Dominant S	Species That	1	(A)
1				Total Number of Domi	: nant Species		
2				Across All Strata:	indire opecies	1	(B)
3.	·			Percent of Dominant S	pecies That	100	(4 (D)
4				Are OBL, FACW, or FAC	:	100	(A/B)
с				Prevalence Index work	sheet:		
7				- <u>Total % Cover</u>	of:	<u>Multiply</u>	<u>By:</u>
7		- Total Cov	~	OBL species	0	x 1 =	0
Capling/Church Strateurs (Distaires, 15.ft.)	0	- 10tal COVe	51	FACW species	40	x 2 =	80
<u>Sapiing/Shrub Stratum</u> (Plot Size: <u>15 it</u>)				FAC species	0	x 3 =	0
1	·			FACU species	0	x 4 =	0
2.				- UPL species	0	x 5 =	0
3.				- Column Totals	40	(A)	80 (B)
4	·			Prevalence Ir	ndex = B/A =	2	
5.				Hydrophytic Vegetation	n Indicators:		
6.				1- Rapid Test for H	- - Hydrophytic \	/egetatior	1
/				2 - Dominance Te	st is >50%	0	
	0	= Total Cove	er	3 - Prevalence Inc	lex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	¹ (Provide	supporting
1. <u>Phalaris arundinacea</u>	40	Yes	FACW	- data in Remarks or on	a separate sh	neet)	
2				Problematic Hydr	ophytic Vege	tation ¹ (Ex	(plain)
3				¹ Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4				present, unless disturb	ed or proble	matic	
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) oi	r more in	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub - Woody	/ plants less t	han 3 in. I	OBH and
9				greater than or equal t	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 IT TAII.	20.6
12				woody vines – All wood	dy vines grea	ter than 3	.28 TT IN
	40	= Total Cove	er	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetatio	n Present?	res 🟒 N	lo
1				_			
2.							
3.							
4.				-			
	0	= Total Cove	er				
		-					

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

Active agricultural field. 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

Profile Des	cription: (Describe	to the	depth needed to	docu	ment the	e indicato	r or confirm th	e absence of indi	cators.)
Depth	Matrix		Redo	x Fea	tures				
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Tex	kture	Remarks
0 - 5	10YR 3/1	75	7.5YR 4/6	25	С	M/PL	C	lay	
5 - 7	10YR 2/1	60	10YR 3/4	40	С	Μ	Grave	elly Clay	
7 - 20	10YR 5/1	60	10YR 5/8	40	С	М	Grave	elly Clay	_
				·					
				· —					-
				· —					
				· —					
				· —					
				·					
				·					
¹ Type: C =	Concentration, D =	Deple	tion, RM = Reduc	ed Ma	trix, MS =	= Maskeo	l Sand Grains.	² Location: PL = P	Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators fo	r Problematic Hydric Soils ³ :
Histoso	ol (A1)		Polyvalue E	Below	Surface ((S8) (LRR	R, MLRA 149B)	2 cm Mu	ck (A10) (LRR K. L. MLRA 149B)
Histic E	pipedon (A2)		Thin Dark S	Surfac	e (S9) (LR	RR R, MLF	A 149B)	Coast Pra	airie Redox (A16) (LRR K. L. R)
Black H	listic (A3)		Loamy Mu	cky Mi	ineral (F1) (LRR K,	L)	5 cm Mu	cky Peat or Peat (S3) (I RR K. L. R)
Hydrog	gen Sulfide (A4)		Loamy Gle	yed M	latrix (F2)	1		Dark Sur	face (S7) (I RR K 1)
Stratifie	ed Layers (A5)		_✔ Depleted №	latrix	(F3)			Polyvalue	e Below Surface (S8) (I RR K. I.)
Deplete	ed Below Dark Surf	ace (A	11) 🖌 Redox Darl	< Surf	ace (F6)			Thin Dar	k Surface (S9) (I BB K I)
Thick D	ark Surface (A12)		Depleted D	ark S	urface (F	7)		Iron-Mar	nganese Masses (E12) (I RR K R)
Sandy I	Mucky Mineral (S1)		Redox Dep	ressic	ons (F8)			li on mai	t Eloodolain Soils (E19) (MI BA 1/19B)
Sandy	Gleyed Matrix (S4)							Mosic Sp	odic (TA6) (MI DA 144A 145 149B)
Sandy	Redox (S5)							Niesic Sp Rod Para	ant Material (F21)
Strippe	ed Matrix (S6)							Very Sha	llow Dark Surface (TE12)
Dark Si	urface (S7) (LRR R, I	MLRA 1	49B)					Very Sha	volain in Romarks)
³ Indicators	់ of hydrophytic veរ្	getatio	n and wetland hy	drolo	gy must l	be prese	nt, unless distu	rbed or problema	atic.
Restrictive	Layer (if observed)	:							
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:						•			
A positive	indication of hydric	soil w	as observed. The	criter	ion for h	vdric soil	is met. Soil sig	nificantly disturbe	ed as a result of tilling. Soil disturbed.
although n	ot significantly end	ough to	obscure hydric s	oil ind	dicators,	as a resu	lt of historical f	illing or grading.	0
0	0 ,	0	,					0 0 0	
l									
l									

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 South



Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	ek Solar Projec	city/C	ounty: Sprakers, Montg	gomery	Sampling Date: 2021-Sept-09					
Applicant/Owner: SunEast			State: NY				Sampling Point: W-RDS-10_PFO-101			
Investigator(s): Rya	n Snow, Abi Lig	ht, Abi Light	Section, Township, Range: NA							
Landform (hillslope, t	errace, etc.):	Depression	Local relief	(concave, conve	x, none):	Concave	Slope (%): 1 to 3			
Subregion (LRR or ML	RA): LRR	L	Lat:	42.838103	Long:	-74.485598	Datum: WGS84			
Soil Map Unit Name:	Madalin silty	clay loam, 0 to 3 perc	ent slopes			NWI classifi	cation: None			
Are climatic/hydrolog	ic conditions or	n the site typical for th	is time of year?	Yes 🟒 No _	(If no	o, explain in Rema	arks.)			
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sig or Hydrology nat	nificantly disturbed? turally problematic?	Are "Normal (If needed, e	l Circumst explain an	tances" present? y answers in Rem	Yes 🟒 No narks.)			

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-RDS-10
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 one is required; check a	all that apply)	Secondary Indicators (minimum of two required)	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 		 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? Yes No	Depth (inches):	_	
Water Table Present? Yes 🖌 No	Depth (inches): 8	Wetland Hydrology Present? Yes No	
Saturation Present? Yes 🖌 No	Depth (inches): 1		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well Remarks: The criterion for wetland hydrology is met. A positive inc	l, aerial photos, previous inspections), dication of wetland hydrology was obs	f available:	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-10_PFO-101

Tree Stratum (Plot size: _ 30 ft _)	Absolute	Dominant	Indicator	Dominance Test worksh	neet:		
	% Cover	Species?	Status	Number of Dominant S	pecies That	2	(A)
1. Ostrya virginiana	45	Yes	FACU	Total Number of Domin	ant Sharias		
2. Tsuga canadensis	25	Yes	FACU	Across All Strata:	and species	4	(B)
3		· ·		Percent of Dominant Sc	pecies That		
4.		· ·		Are OBL, FACW, or FAC:		50	(A/B)
5		· ·		Prevalence Index works	heet:		
6		·		Total % Cover	of:	<u>Multiply</u>	<u>By:</u>
7		· ·		OBL species	0	x 1 =	0
	70	= Total Cov	er	FACW species	85	x 2 =	170
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
1		·		FACU species	70	x 4 =	280
2				UPL species	0	x 5 =	0
3				Column Totals	155	(A)	450 (B)
4				Prevalence In	dex = B/A =	29	130 (B)
5							
6				1 Papid Tost for H	Indicators.	logotation	
7					st ic > $E006$	regetation	
	0	= Total Cov	er	2 - Dominance res	115 > 50%		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				3 - Prevalence inte	$2X IS \ge 5.0^{\circ}$	1 (Drovida	cupporting
1. Impatiens capensis	55	Yes	FACW	4 - Morphological	Audpidiions sonarato sh		supporting
2. Onoclea sensibilis	20	Yes	FACW	Problematic Hydro	nnhytic Vege	tation ¹ (Ex	(nlain)
3. Dryopteris carthusiana	10	No	FACW	Indicators of hydric soi	and wetlan	d hydrolo	gy must he
4.				present, unless disturbe	ed or probler	matic	59 111050 00
5.				Definitions of Vegetatio	n Strata:		
6.				Tree – Woody plants 3 i	n. (7.6 cm) or	r more in i	diameter at
7.		· ·		breast height (DBH), reg	gardless of h	eight.	
8.		·		Sapling/shrub - Woody	plants less t	han 3 in. [OBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (non-woody)	plants, reg	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12		<u> </u>		Woody vines - All wood	ly vines great	ter than 3	.28 ft in
	85	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		- 10001 000	CI	Hydrophytic Vegetation	n Present?	res 🟒 N	lo
1							
י ז				•			
2							
4		Tabal Car					
			er				
Remarks: (Include photo numbers here or on a separate	sheet.)						
A positive indication of hydrophytic vegetation was obse	erved (Pre	valence Ind	ex is ≤ 3.00).			

SOIL

Despiration Incount resources Incount resources 05 10/R 3/1 90 Color (moist) % Texture Remarks 520 10/R 3/1 90 Color (moist) % Texture Remarks 520 10/R 3/3 70 10/R 3/8 30 C M Clay S20 10/R 3/3 70 10/R 3/8 30 C M Clay S20 10/R 3/3 70 10/R 3/8 30 C M Clay S20 10/R 3/3 70 10/R 3/8 30 C M Clay S20 10/R 3/3 70 10/R 3/8 30 C M Clay S20 10/R 3/3 20 C M Clay Secondary Secondary <td< th=""><th>rofile Desc</th><th>ription: (Describe 1</th><th>to the</th><th>aepth needed to</th><th>aocun</th><th>nent the</th><th>indicato</th><th>r or confirm the a</th><th>adsence of indicators.)</th></td<>	rofile Desc	ription: (Describe 1	to the	aepth needed to	aocun	nent the	indicato	r or confirm the a	adsence of indicators.)
united Color (mosu) ** Lobic (mosu) ** Ivertify and the second s	Depth _	Matrix		Color (moint)	(reau	ures	1.0.02	Tautuma	Demonius
0:3-2 10YR 5/3 70 10YR 5/3 30 C M Clay 2:20 10YR 5/3 70 10YR 5/3 30 C M Clay 2:20 10YR 5/3 70 10YR 5/3 30 C M Clay 2:20 10YR 5/3 70 10YR 5/3 30 C M Clay 2:20 10YR 5/3 70 10YR 5/3 30 C M Clay 2:20 10YR 5/3 70 10YR 5/3 10YR 5/3 <td>(inches)</td> <td></td> <td><u> </u></td> <td></td> <td><u>%</u></td> <td>туре-</td> <td>LOC²</td> <td>Texture</td> <td>Remarks</td>	(inches)		<u> </u>		<u>%</u>	туре-	LOC ²	Texture	Remarks
S - 20 TURK S/3 70 TURK S/8 20 C M Lisy S - 20 TURK S/3 70 TURK S/8 20 C M Lisy S - 20 TURK S/3 TURK S/8 20 C M Lisy S - 20 TURK S/3 TURK S/8 S - 20 TURK S/8 S - 20 S - 20 TURK S/8 S - 20 TURK S/8 S - 20 TURK S/8 S - 20 S - 20 TURK S/8 S - 20 TURK S/8 S - 20 TURK S/8 S - 20 S - 20 TURK S/8 S - 20 TURK S/8 S - 20 TURK S/8 S - 20 S - 20 TURK S/8 TURK S/8 S - 20 TURK S/8 S - 20 TURK S/8 S - 20 TURK S/8	0-5	10YR 3/1	90	10YR 4/4	10	<u> </u>	<u>IVI</u>	Clay	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Indicators: Indicators in Microsoft (CA) — Polyvalue Below Surface (S3) (LRR R, MLRA 1499) — Can Muck (A10) (LRR k, L, R) Histosol (A1) — Polyvalue Below Surface (S3) (LRR R, MLRA 1499) — Coast Prairie Redox (A10) (LRR k, L, R) Histosoft (A2) — Thin Dark Surface (S3) (LRR R, MLRA 1499) — Coast Prairie Redox (A10) (LRR k, L, R) Histosoft (A2) — Thin Dark Surface (S3) (LRR K, L, R) — Dark Surface (S3) (LRR K, L, R) Linder Micro (CA) — Loamy Gleyed Matrix (F2) — Dark Surface (S3) (LRR K, L, R) Stratfield Layers (A5) — Depleted Matrix (F2) — Dark Surface (S3) (LRR K, L, R) Depleted Balow Dark Surface (A11) _ Redox Dark Surface (F7) _ Thin Dark Surface (S3) (LRR K, L, R) Stratfee (A12) _ Depleted Dark Surface (F7) _ Thin Dark Surface (S1) (LRR K, L, R) Sandy Mcdx (Mineral (S1)) _ Red Arerent Matrix (S4) _ Polytaelue Belows Baloses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S6) _ Red Parent Matria (P21) _ Other (Explain in Remarks) Indicators of hydrophysic vegetation and wetland hydrology must be present; unless disturbed or problematic. _ Strifter Layer (Moserved): Type: None _ Hydric Soil Prese	5 - 20	10YR 5/3	/0	10YR 5/8	30	(M	Clay	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. -Location: PL = Pore Lining, M = Matrix. yrdric Soil Indicators: Indicators for Problematic Hydric Soils? Histos (A1) Polyvalue Below Surface (S) (LRR N, MLRA 149B)									
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Location: PL = Pore Lining, M = Matrix. rdic Soil Indicators Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S3) (LRR R, MLRA 1499) Coast Prairie Redox (A10) (LRR K, L, R) Histosol (A2)					·				
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Indicators: Indicators: Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 1498)					·				
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. ydrić Soli Indicators: Indicators for Problematic Hydric Solis? Histos Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 1498)					·				
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. yrbitsool (Indicators: Indicators (Construction) Indicators (Construction) Histisool (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, RA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Scast Draite Redox (A16) (LRR K, L, R) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) // Redox Depressions (F6) Thin Dark Surface (S9) (LRR K, L) Sandy Gleged Matrix (S4) Depleted Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Sandy Gleged Matrix (S4) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Durke Matrix (S4) Sandy Redox (S5) Red Parent Material (F21) Durker (Trobarned): Jark Surface (S7) (LRR K, MLRA 149B) Very Shallow Dark Surface (TF12) Dirker (Trobarned): Jark Surface (S7) (LRR K, MLRA 149B) Very Shallow Dark Surface (TF12) Dirker (Trobarned): Jark Surface (S7) (LRR K, MLRA 149B) Very Shallow Dark Surface (TF12) Dirker (Trobarned): Jark Surface (T7) (LRR K, MLRA 149B) Very Shallow Dark Surface (TF									
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. ydric Soll Indicators: Indicators: Indicators:					· <u> </u>				
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ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 2Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils? Histos (A1)									
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Por Lining, M = Matrix. ydric Soll Indicators: Indicators for Problematic Hydric Soils?: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1498) 2 cm Muck (A10) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Muck (A10) (LRR K, L, R) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (A12) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 1498) Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 1498) Resic Spodic (TA6) (MLRA 1448, 145, 1498) Sandy Redox (S5) Straface (T51) Very Shallow Dark Surface (T12) Optieted Dark Surface (F7) Stripped Matrix (S6) Brane Matrix (S6) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 1448, 145, 1498) Stripped Matrix (S6) Straface (T51) Very Shallow Dark Surface (T512) Other (Explain in Remarks) Thick park Surface (S7) (LRR R, MLRA 1498) Very Shallow Dark Surface (T12) Other (Explain in Remarks) Thick park Surface (S7) (LRR R, MLRA 1498) Very Shallow Dark Surface (T12)					·	<u> </u>			
Jpric Soil Indicators: Indicators indicators: Indicators for Problematic Hydric Soils*: Histos Id (A1)	vne: (= (oncentration D =	 Deplet	ion RM = Reduce	d Mat	rix MS =	Masked	Sand Grains 2	ocation: PL = Pore Lining M = Matrix
Histool (1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peet or Peat (S3) (LRR K, L, R) Black Histic (A3) Loamy Gleyed Matrix (F2) S cm Mucky Peet or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A112) Depleted Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Thin Dark Surface (S1) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (I1) Ze Redox Dark Surface (F7) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Depth (inches): None Hydric Soil Present? Yes No Type: None Hydric Soil Present? Yes No Deptht (inches): Sindication o	vdric Soil I	indicators:	Schief	ien neudle	a mal	, 115 -			Indicators for Problematic Hydric Soils ³
Histic Epigedon (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 Suffide (A4) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Depleted Matrix (F3) Doty alue Below Surface (S9) (LRR K, L) Thic Nark Surface (A11) Redox Depressions (F8) Dolyted Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Thin Dark Surface (S9) (LRR K, L, R) Sandy Redox (S5) Sendy Mucky Mineral (F1) Red Parent Material (F21) Stripped Matrix (S6) Other (Explain in Remarks) Sandy Redox (S5) Red Parent Material (F21) 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: Type: None Depth (inches): Yes No	Histosol	(A1)		Polvvalue Be	elow 9	urface (S	58) (LRR	R. MLRA 149B)	
	Histic Ep	bipedon (A2)		Thin Dark Si	urface	(S9) (LRF	R, MLR	A 149B)	2 CHI WUCK (ATU) (LKK K, L, MLKA 149B) Coast Prairie Redoy (A16) (LDD K L D)
	_ Black Hi	stic (A3)		Loamy Mucl	ky Mir	ieral (F1)	(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (I DD K I D)
	Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	trix (F2)			Dark Surface (S7) (I RR K 1)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	_ Stratifie	d Layers (A5)		Depleted M	atrix (-3)			Polyvalue Below Surface (S8) (LRR K. L)
Thick Dark Surface (A12) Depleted Dark Surface (F?)	_ Deplete	d Below Dark Surfa	ace (A1	1)_✓ Redox Dark	Surfa	ce (F6)			Thin Dark Surface (S9) (LRR K, L)
	_ Thick Da	ark Surface (A12)		Depleted Da	ark Su	rface (F7))		Iron-Manganese Masses (F12) (LRR K, L, R)
	_ Sandy N	lucky Mineral (S1)		Redox Depr	essior	is (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
	_ Sandy G	leyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	_ Sandy R	edox (S5)							Red Parent Material (F21)
	_ Stripped	1 Matrix (S6)		400)					Very Shallow Dark Surface (TF12)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: None Depth (inches): emarks: positive indication of hydric soil was observed. The criterion for hydric soil is met.	Dark Su	11ace (37) (LKK K, W		496)					Other (Explain in Remarks)
estrictive Layer (if observed): Type: None Depth (inches):	ndicators	of hydrophytic veg	etatior	n and wetland hyd	Irolog	y must b	e preser	nt, unless disturbe	ed or problematic.
Type: None Hydric Soil Present? Yes _ No	estrictive L	_ayer (if observed):							
emarks: positive indication of hydric soil was observed. The criterion for hydric soil is met.		Туре:		None			Hydric	Soil Present?	Yes _ 🖌 No
emarks: positive indication of hydric soil was observed. The criterion for hydric soil is met.		Depth (inches):							
	positive ir	ndication of hydric	soil wa	as observed. The o	riteri	on for hy	dric soil	is met.	

Hydrology Photos



Vegetation Photos

Soil Photos



Photo of Sample Plot North





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: Spakers, Montgomery	Sampling Date: 2021-Sept-09	
Applicant/Owner: SunEast	State: NY	Sampling Point: W-RDS-10_UPL-1	
Investigator(s): Ryan Snow, Abi Light	Section, Township, Rang	e: NA	
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, no	ne): Undulating Slope (%): 0	to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8359691587 L	ong: -74.4887208803 Datum: WGS	84
Soil Map Unit Name: Lansing silt loam, 3 to 8 pe	ercent slopes	NWI classification: None	
Are climatic/hydrologic conditions on the site typic	al for this time of year? Yes 🖌 No	(lf no, explain in Remarks.)	
Are Vegetation ∠,Soil ∠,or HydrologyAre Vegetation,Soil,or Hydrology	significantly disturbed? Are "Normal Circ naturally problematic? (If needed, expla	umstances" present? Yes No in any answers in Remarks.)	<u> </u>

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. Circumstances are not normal due to agricult	ural activities.

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one	Secondary Indicators (minimum of two required)			
 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 Sur 	Vater (A1) Water-Stained Leaves (B9) er Table (A2) Aquatic Fauna (B13) n (A3) Marl Deposits (B15) arks (B1) Hydrogen Sulfide Odor (C1) : Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) osits (B3) Presence of Reduced Iron (C4) : or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) Vegetated Concave Surface (B8)		 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)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	– _ Wetland Hydrology Present? –	Yes No
Describe Recorded Data (stream ga	uge, monitoring well, ae	rial photos, previous inspections), if	available:	
Remarks:				
The criterion for wetland hydrology	is not met. No positive i	indication of wetland hydrology was	observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-10_UPL-1

Tree Stratum (Districe, 20 ft.)	Absolute	Dominant	Indicator	Dominance Test workshe	et:		
<u>nee stratum</u> (Plot size. <u></u>)	% Cover	Species?	Status	Number of Dominant Spe	cies That	0	(A)
1				Are OBL, FACW, or FAC:			
2.				Total Number of Dominar	nt Species	1	(B)
3.				Across All Strata:			
4.				Percent of Dominant Spe	cies That	0	(A/B)
5.				Are OBL, FACVV, or FAC:			
6.				Prevalence Index workshe	eet:		_
7.				Iotal % Cover of		Multiply	<u>By:</u>
	0	= Total Cove	r	OBL species	0	x1=	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	0	x 2 =	0
1.				FAC species	0	x 3 =	0
2				FACU species	0	x 4 =	0
3				UPL species	90	x 5 =	450
<u> </u>				Column Totals	90	(A)	450 (B)
т. 				Prevalence Inde	ex = B/A =	5	
5				Hydrophytic Vegetation Ir	ndicators:		
7				1- Rapid Test for Hyd	drophytic V	'egetatior	ı
/·		- Total Covo	r	2 - Dominance Test i	s > 50%		
Llaub Churchum (Dist size) 5 ft	0	- 10tal Cove	ſ	3 - Prevalence Index	is ≤ 3.0 ¹		
Herb Stratum (Plot size: <u>5 it</u>)	00	Vac	וחו	4 - Morphological Ac	daptations	(Provide	supporting
1. <u>Zea mays</u>	90	res	UPL	data in Remarks or on a s	eparate sh	eet)	
2.				Problematic Hydrop	hytic Vege	tation ¹ (Ex	kplain)
3				¹ Indicators of hydric soil a	ind wetlan	d hydrolo	gy must be
4.				present, unless disturbed	or proble	matic	
5				Definitions of Vegetation	Strata:		
6				Tree – Woody plants 3 in.	(7.6 cm) oı	more in	diameter at
7				breast height (DBH), rega	rdless of h	eight.	
8				Sapling/shrub - Woody pl	ants less t	han 3 in. I	DBH and
9				greater than or equal to 3	3.28 ft (1 m) tall.	
10				Herb – All herbaceous (no	n-woody)	plants, re	gardless of
11				size, and woody plants les	s than 3.2		20.6
12				height	vines great	er than 3	.28 It in
	90	= Total Cove	r				-
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation F	Present?	/es I	No 🟒
1							
2							
3.							
4.							
	0	= Total Cove	r				
Pemarks: (Include photo numbers here or on a constant	choot)	-					
Active agricultural field. No positive indication of hydror	e sneet.)	atation was a	bearved (>	50% of dominant species in	adavad ac		lrior)
	inytic vege		inseiveu (2	50% of dominant species if	IUENEU dS		

SOIL

(inches)	Matrix		Redox	Feat	ures			
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 10	10B 4/1	90	10YR 4/6	10	С	M C	ay Loam	
10 - 20	10YR 5/3	100					Clay	
				_				
ype: C = C	oncentration, D =	Depleti	on, RM = Reduced	Mati	rix, MS =	Masked Sand Gra	ns. ² Locatio	n: PL = Pore Lining, M = Matrix.
dric Soil I	ndicators:						Indic	ators for Problematic Hydric Soils ³ :
_ Histosol	(A1)		Polyvalue Be	low S	urface (S	58) (LRR R, MLRA 1	19B) 2	cm Muck (A10) (LRR K. L. MLRA 149B)
_ Histic Ep	oipedon (A2)		Thin Dark Su	rface	(S9) (LRF	R R, MLRA 149B)		Coast Prairie Redox (A16) (LRR K, L, R)
_ Black His	stic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L)	5	cm Mucky Peat or Peat (S3) (LRR K, L, R)
_ Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S7) (LRR K, L)
_ Stratified	d Layers (A5)		_ ∕ Depleted Ma	itrix (F	-3)		F	Polyvalue Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surf	ace (A11	1) Redox Dark	Surfac	ce (F6)		T	hin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	rk Sui	face (F7))		ron-Manganese Masses (F12) (LRR K, L, R)
_ Sandy M	IUCKY MINERAL (ST)		Redox Depre	ession	IS (F8)		F	viedmont Floodplain Soils (F19) (MLRA 149B)
_ Sandy G	leyed Matrix (S4)						N	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_ Sandy R	edox (S5)						F	Red Parent Material (F21)
_ Stripped	Matrix (S6)						V	/ery Shallow Dark Surface (TF12)
_ Dark Sui	rface (S7) (LRR R, N	ALRA 14	!9B)				0	Other (Explain in Remarks)
	6 1 1 1 1	getation	and wetland hyd	rology	/ must b	e present, unless (listurbed or p	roblematic.
dicators	of hydrophytic veg							
dicators (strictive L	of hydrophytic veg .ayer (if observed):	:				Hydric Soil Prese	nt?	Yes 🖌 No
dicators (strictive L	of hydrophytic veg .ayer (if observed) : Type:	:	None			inyune son mese		
dicators (strictive L	of hydrophytic veg . ayer (if observed) : Type: Depth (inches):	:	None			Tryune Son Trese		
strictive L	of hydrophytic veg . ayer (if observed) : Type: Depth (inches):	: 	None					
estrictive L estrictive L emarks: positive in	of hydrophytic veg . ayer (if observed) : Type: Depth (inches): ndication of hydric	soil wa	None s observed. The c	riterio	on for hy	dric soil is met. So	l significantly	disturbed as a result of tilling. Soil disturbed
dicators strictive L marks: positive in hough no	of hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c	riteric il indi	on for hydrators, a	dric soil is met. So s a result of histor	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed rading.
marks: bositive in hough no	of hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil was	None s observed. The c obscure hydric so	riterio il indi	on for hy cators, a	dric soil is met. So s a result of histor	l significantly ical filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators strictive L marks: positive in hough no	of hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil was	None s observed. The c obscure hydric so	riteric il indi	on for hy cators, a	dric soil is met. So s a result of histor	l significantly ical filling or g	disturbed as a result of tilling. Soil disturbed rading.
marks: boositive in boositive in	of hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil was	None s observed. The c obscure hydric so	riteric il indi	on for hy cators, a	dric soil is met. So s a result of histor	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators strictive L marks: positive in hough no	of hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric nt significantly eno	soil wa	None s observed. The c obscure hydric so	riteric il indi	on for hydraether hydraether a cators, a	dric soil is met. So	l significantly ical filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators (strictive L marks: positive ir hough nc	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric nt significantly eno	soil wa	None s observed. The c obscure hydric so	riteric il indi	on for hydradiad	dric soil is met. So s a result of histor	l significantly ical filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators : strictive L marks: mositive ir nough no	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric il indi	on for hy cators, a	dric soil is met. So s a result of histor	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators : strictive L marks: positive in nough nc	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric il indi	on for hy cators, a	dric soil is met. So s a result of histor	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators : strictive L marks: positive ir hough nc	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric il indi	on for hydicators, a	dric soil is met. So s a result of histor	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed rading.
marks: boositive ir hough nc	of hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric il indi	on for hyd	dric soil is met. So s a result of histor	l significantly ical filling or g	disturbed as a result of tilling. Soil disturbed rading.
marks: cositive ir hough nc	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric il indi	on for hyı cators, a	dric soil is met. So s a result of histor	l significantly ical filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators (strictive L marks: positive ir hough nc	of hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric	on for hyı cators, a	dric soil is met. So	l significantly ical filling or g	disturbed as a result of tilling. Soil disturbed rading.
marks: positive ir hough nc	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so		on for hyı cators, a	dric soil is met. So	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators (strictive L marks: positive ir hough nc	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric	on for hyı cators, a	dric soil is met. So	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed rading.
dicators (strictive L marks: positive in hough no	or hydrophytic veg .ayer (if observed): Type: Depth (inches): ndication of hydric ot significantly eno	soil wa	None s observed. The c obscure hydric so	riteric	on for hyı cators, a	dric soil is met. So	l significantly cal filling or g	disturbed as a result of tilling. Soil disturbed

Vegetation Photos



Soil Photos

Photo of Sample Plot North



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Sprakers, Montgomery	Sampling Date: 2021-Sept-09
Applicant/Owner: SunEast	State: NY	Sampling Point: W-RDS-10_UPL-101
Investigator(s): Ryan Snow, Abi Light, Abi L	ight Section, Township, Range:	NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none	: Undulating Slope (%): 1 to 3
Subregion (LRR or MLRA): LRR L	Lat: 42.838181 Long	: -74.486343 Datum: WGS84
Soil Map Unit Name: Madalin silty clay loa	m, 0 to 3 percent slopes	NWI classification: None
Are climatic/hydrologic conditions on the site	e typical for this time of year? Yes 🧹 No (If	no, explain in Remarks.)
Are Vegetation, Soil, or Hydro Are Vegetation, Soil, or Hydro	ology significantly disturbed? Are "Normal Circun ology naturally problematic? (If needed, explain a	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 🟒	lf yes, optional Wetland Site ID:						
Remarks: (Explain alternative procedures her	Remarks: (Explain alternative procedures here 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	Secondary Indicators (minimum of two required)			
 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 Sur 	Vater (A1) Water-Stained Leaves (B9) er Table (A2) Aquatic Fauna (B13) n (A3) Marl Deposits (B15) arks (B1) Hydrogen Sulfide Odor (C1) : Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) osits (B3) Presence of Reduced Iron (C4) : or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) Vegetated Concave Surface (B8)		 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)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	– _ Wetland Hydrology Present? –	Yes No
Describe Recorded Data (stream ga	uge, monitoring well, ae	rial photos, previous inspections), if	available:	
Remarks:				
The criterion for wetland hydrology	is not met. No positive i	indication of wetland hydrology was	observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-10_UPL-101

Trace Church um (Dich cincy 20.4)	Absolute	Dominant	Indicator	Dominance Test worksh	eet:		
<u>iree Stratum</u> (Plot Size: <u>30 It</u>)	% Cover	Species?	Status	Number of Dominant Sp	oecies That	1	(A)
1. <i>Tsuga canadensis</i>	55	Yes	FACU	Are OBL, FACW, or FAC:			(~)
2. Ostrya virginiana	40	Yes	FACU	Total Number of Domina	ant Species	4	(B)
3.				Across All Strata:			
4.				Percent of Dominant Sp	ecies That	25	(A/B)
5.				Are OBL, FACVV, or FAC:	4.		<u> </u>
6.				Prevalence Index works	neet:	N 4 41	D
7.				OPL spacies	<u>n:</u>		<u>ву:</u>
	95	= Total Cov	er		25	x I	<u> </u>
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	25	x Z = -	50
1.				FAC species	0	× 3 = -	0
2.				FACU species	115	× 4 = _	460
3.				UPL species	0	x 5 = _	0
4.				Column Totals	140	(A) _	510 (B)
5.		·		Prevalence Inc	dex = B/A =	3.6	
б. 		·		Hydrophytic Vegetation	Indicators:		
7		·		1- Rapid Test for Hy	ydrophytic V	egetation/	1
···	0	= Total Cov	er	2 - Dominance Test	t is > 50%		
Herb Stratum (Plot size: 5 ft)	0	-		3 - Prevalence Inde	$x \text{ is} \leq 3.0^1$		
1 Dryonteris carthusiana	25	Ves	FACW	4 - Morphological A	Adaptations	(Provide	supporting
2 Ostrva virginiana	20		FACIL	data in Remarks or on a	separate sh	leet)	
2			TACO	Problematic Hydro	phytic Vege	tation ¹ (E>	(plain)
3				¹ Indicators of hydric soil	and wetlan	d hydrolo	gy must be
4		·		present, unless disturbe	d or problei	matic	
з		·		Definitions of Vegetation	n Strata:		
o		·		Tree – Woody plants 3 in	i. (7.6 cm) oi	more in	diameter at
7		·		breast neight (DBH), reg	ardiess of n	eignt. han 2 in 1	
8		·		greater than or equal to	2 28 ft (1 m	nan 3 in. L Vtall	JBH and
9		·		Herb All borbacoous (r		plants ro	ardless of
10				size and woody plants l	ess than 3.2	8 ft tall	gar diess of
11		·		Woody vines - All woody	/ vines great	ter than 3	28 ft in
12		·		height.	,		201011
	45	= Total Cov	er		Procent?		
Woody Vine Stratum (Plot size: <u>30 ft</u>)					riesent:	ies i	NO <u></u>
1							
2							
3							
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separate	e sheet.)			-			
No positive indication of hydrophytic vegetation was ob	served (≥	50% of dom	inant specie	es indexed as FAC– or drie	r).		
			1				

SOIL

Color (moist) % Color (moist) % Type! Loc? Texture Remarks 0 - 5 10YR 4/2 75 7.5YR 4/6 25 C M Sandy Clay Learn		Matrix		Redo	x Feat	ures			•)
0.5 107R 3/3 100	inchesi	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
5 - 20 10/R 4/2 75 7.5/R 4/6 25 C M Sandy Clay Loam 5 - 20 10/R 4/2 75 7.5/R 4/6 25 C M Sandy Clay Loam 5 - 20 10/R 4/2 75 7.5/R 4/6 25 C M Sandy Clay Loam 5 - 20 10/R 4/2 75 7.5/R 4/6 25 C M Sandy Clay Loam 5 - 20 10/R 4/2 75 7.5/R 4/6 25 C M Sandy Clay Loam 9 10/R 4/2 75 10/R 4/2	0 - 5	10YR 3/3	100	20101 (110104)		<u>.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	(I	avloam	Keinerko
	5 - 20	10YR 4/2	75	7.5YR 4/6	25		M Sand	v Clav I oam	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils?	0 20			//0111 // 0					
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. -Location: PL = Pore Lining, M = Matrix. ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. -Location: PL = Pore Lining, M = Matrix. Histosol (A1)									
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Indicators Sol Indicators: Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRK K, L NLRA 149B)					·		·		
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosold (A1)					·		·		
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. yric 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)							·		
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. 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)			·						
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils?						·			
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ?Location: PL = Pore Lining, M = Matrix. which Soil Indicators: Indicators for Problematic Hydric Soils? Histosol (A1)						·			
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators:						·			
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histics (A1)						·			
ync: Contention: D Depletedon, Min Neudecontrol (S) Undeced (S) Indicators: I	vne: (= (Concentration D =	Denletic	n RM = Reducer	- Mati	ix MS =	Masked Sand Grains	² location: Pl = Pore Li	ning M = Matrix
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histos (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S9) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Trom-Manganese Masses (F12) (LRR K, L, R) Sandy Redox (S5)	vdric Soil	Indicators:	Depietit	in the neutre		- CIVI , IVI		Indicators for Prof	blematic Hydric Soils ³
	Histoso	l (A1)		Polyvalue Be	low S	urface (S	8) (LRR R. MI RA 149R)		
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Coast Prairie Red0x (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 (S7) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Medox (S5) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149B) Sardy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): None Depth (inches): Hydric Soil Present? Yes_ No_ positive indication of hydric soil was observed. The criterion for hydric soil is met. Sin met.	_ Histic E	pipedon (A2)		Thin Dark Su	irface	(S9) (LRR	R, MLRA 149B)	2 cm Muck (A1	U) (LKK K, L, MLKA 149B)
	Black H	istic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L)	5 cm Mucky Pe	euux (A10) (LKK K, L, K) Dat or Peat (S3) (I DD K I D)
	Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)		Dark Surface (57) (I RR K 1)
	Stratifie	ed Layers (A5)		_ ∠ Depleted Ma	atrix (F	3)		Polvvalue Belo	w Surface (S8) (LRR K. L)
Linck Dark Surface (A12)	_ Deplete	ed Below Dark Surf	ace (A11) Redox Dark	Surfac	:e (F6)		Thin Dark Surf	ace (S9) (LRR K, L)
	_ Thick D	ark Surface (A12)		Depleted Da	rk Sui	tace (F7)		Iron-Manganes	se Masses (F12) (LRR K, L, R)
	_ Sanuy r			Redox Depr	ession	S (F8)		Piedmont Floo	dplain Soils (F19) (MLRA 149B)
	_ Sandy (Jieyed Matrix (54)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	_ Sanuy i Strippo	d Matrix (S6)						Red Parent Ma	iterial (F21)
	Dark Si	urface (S7) (I RR R I		9B)				Very Shallow D	Park Surface (TF12)
ndicators 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): emarks: positive indication of hydric soil was observed. The criterion for hydric soil is met.				56,				Other (Explain	in Remarks)
estrictive Layer (if observed): Type: None Hydric Soil Present? Yes _ No Depth (inches): emarks: positive indication of hydric soil was observed. The criterion for hydric soil is met.	ndicators	of hydrophytic veg	getation	and wetland hyd	rolog	/ must be	e present, unless distu	bed or problematic.	
Type: None Hydric Soil Present? Yes _ ✓ No Depth (inches):	estrictive	Layer (if observed)	:						
Depth (inches): emarks: positive indication of hydric soil was observed. The criterion for hydric soil is met.		Туре:		None	_		Hydric Soil Present?		Yes 🟒 No
emarks: positive indication of hydric soil was observed. The criterion for hydric soil is met.		Depth (inches):							
	Indicators Restrictive	of hydrophytic veg Layer (if observed) Type: Depth (inches):	getation :	and wetland hyd None	rolog	/ must be	e present, unless distur Hydric Soil Present?	bed or problematic.	Yes No
	emarks: positive i	ndication of hydric	soil was	observed. The c	riteric	n for hyd	dric soil is met.		
	emarks: positive i	ndication of hydric	soil was	observed. The c	riteric	n for hyd	dric soil is met.		
	emarks: positive i	ndication of hydric	soil was	observed. The c	riteric	n for hyd	dric soil is met.		
	emarks: positive i	ndication of hydric	soil was	observed. The c	riteric	n for hyd	dric soil is met.		
	emarks: positive i	ndication of hydric	soil was	observed. The c	riteric	n for hyd	dric soil is met.		
	emarks: positive i	ndication of hydric	soil was	observed. The c	riteric	n for hyd	dric soil is met.		
	emarks: positive i	ndication of hydric	soil was	observed. The c	riteric	n for hyd	dric soil is met.		

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 Project	:	City/County:	Sprakers, Mon	tgomery		Sampling Date:	2021-Sept-10
Applicant/Owner: S	unEast				State: NY		Sampling Point: W	-RDS-11_PSS-1
Investigator(s): Ryar	n Snow, Abi Lig	ht		See	ction, Township, R	ange: N	A	
Landform (hillslope, te	rrace, etc.):	Flood Plain		Local relie	f (concave, convex	, none):	Undulating	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	_		Lat	42.834403084	Long:	-74.4915211936	Datum: WGS84
Soil Map Unit Name:	Fluvaquents	, loamy					NWI classifica	tion: R2UBH
Are climatic/hydrologic	c conditions or	n the site typical	for this time	of year?	Yes 🟒 No _	(If no	o, explain in Remark	(S.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally p	ly disturbed? problematic?	Are "Normal (If needed, ex	Circums kplain an	tances" present? y answers in Remai	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-RDS-11
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PSS. Area is wetland, all three v	vetland parameters are pr	resent.	

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum o	one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two require
 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 Sparsely Vegetated Concave 	Water Aquat Marl I Hydro Oxidiz Preser Recen Thin M Imagery (B7) Other Surface (B8)	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) red Rhizospheres on Living I nce of Reduced Iron (C4) it Iron Reduction in Tilled Sc Juck Surface (C7) (Explain in Remarks)	Roots (C3) vils (C6)	 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?	Yes No Yes No	Depth (inches): Depth (inches):		_ Wetland Hydrology Present? Yes _∠_ No
Saturation Present?	Yes 🟒 No	Depth (inches):	4	_
(includes capillary fringe)				
Describe Recorded Data (stream Remarks: The criterion for wetland hydro	n gauge, monitoring well, a ogy is met. A positive indic	aerial photos, previous insp	ections), if	available: rved (primary and secondary indicators were pro

VEGETATION -- Use scientific names of plants.

Sampling Point: <u>W-RDS-11_PSS-1</u>

	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u> Iree stratum</u> (Plot size: <u>_30 ft</u>)	% Cover	Species?	Status	Number of Dominant S	Species That	3	(A)
1				Total Number of Domi	: nant Spacias		
2				Across All Strata:	nant species	3	(B)
4.				Percent of Dominant S	pecies That	100	(A/B)
5.				Are OBL, FACW, or FAC	:		
6.				 Prevalence Index work 	sheet:		
7.				- <u>Total % Cover</u>	<u>of:</u>	Multiply	<u>By:</u>
	0	= Total Cov	/er	- OBL species -	0	x 1 = _	0
Sanling/Shruh Stratum (Plot size: 15 ft)		-		FACW species	175	x 2 =	350
1 Calix alba	66	Voc		FAC species	0	x 3 =	0
				FACU species	0	x 4 =	0
	20	res	FACW	- UPL species	0	x 5 =	0
3				Column Totals	175	(A)	350 (B)
4.				Prevalence Ir	ndex = B/A =		
5				Hydrophytic Vegetation	n Indicators:		
6.				1- Rapid Test for H	- Hydrophytic V	egetatior	1
/		<u> </u>		2 - Dominance Te	st is >50%	U	
	75	= Total Cov	ver	✓ 3 - Prevalence Inc	lex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	Provide	supporting
1. <i>Solidago gigantea</i>	85	Yes	FACW	- data in Remarks or on	a separate sh	eet)	
2. Onoclea sensibilis	10	No	FACW	Problematic Hvdr	ophytic Vege	tation ¹ (E)	(plain)
3. <i>Salix alba</i>	5	No	FACW	- ¹ Indicators of hydric so	il and wetlan	d hvdrolo	gy must be
4				present, unless disturb	ed or proble	matic	0)
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) oı	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	/ plants less t	han 3 in. I	OBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	dy vines great	ter than 3	.28 ft in
	100	= Total Cov	ver	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatio	n Present?	/es 🟒 N	lo
1.							
2.				-			
3				-			
4				-			
[¬]		= 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

- 12 10YR 3/1	<u>90</u>	10YR 4/6			Gravelly	Clay Loam
/pe: C = Concentr	ation, D = Depl	etion, RM = Reduced M	atrix, MS = N	lasked Sa	and Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
dric Soil Indicato	rs:	Polyvaluo Polov	Curface (59			Indicators for Problematic Hydric Soils ³ :
– Histosof (AT) Histic Epipedon	(A2)	Thin Dark Surfa	ce (S9) (LRR F) (LKK K, 1 R. MLRA 1	MLRA 149B) 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
_ Black Histic (A3)	(·)	Loamy Mucky N	1ineral (F1) (L	.RR K, L)	,	Coast Prairie Redox (A16) (LRR K, L, R)
_ Hydrogen Sulfid	le (A4)	Loamy Gleyed N	/latrix (F2)			Dark Surface (S7) (I RR K. I.)
_Stratified Layers	s (A5)	Depleted Matrix	(F3)			Polyvalue Below Surface (S8) (LRR K. L)
_ Depleted Below	Dark Surface (A	11) <u>✓</u> Redox Dark Sur	face (F6)			Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surfa	ace (A12)	Depleted Dark S	Surface (F7)			Iron-Manganese Masses (F12) (LRR K, L, F
_ Sandy Mucky M	ineral (S1)	Redox Depressi	ons (F8)			Piedmont Floodplain Soils (F19) (MLRA 14
_ Sandy Gleyed N	latrix (S4)					Mesic Spodic (TA6) (MLRA 144A, 145, 149
_ Sandy Redox (S	5)					Red Parent Material (F21)
_ Stripped Matrix	(S6)					Very Shallow Dark Surface (TF12)
_ Dark Surface (S	7) (LRR R, MLRA	149B)				Other (Explain in Remarks)
ndicators of hydro	phytic vegetati	on and wetland hydrold	ogy must be	present,	unless disturbe	d or problematic.
estrictive Layer (if	observed):					
Type:	Large rocks, 4	pits were dug out, can	not			
. yper	dig	g past 12 inches		Hydric	Soil Present?	Yes 🟒 No
Depth (inchos):		13				
(Inches).						<u>_</u>
nositive indication	n of hydric soil y	was observed. The crite	rion for hydr	ic soil is i	met Refusal du	e to coarse fragments
	Tor Hydric Soli V	vas observed. The chie		10 301131	niet. Kerusar uu	e to coarse magnients.

Vegetation 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	Cit	y/County: Sprakers,	Montg	gomery		Sampling Date:	2021-Sept-10	
Applicant/Owner: Sur	nEast				State: NY		Sampling Point: W	/-RDS-11_UPL-1	
Investigator(s): Ryan S	Snow, Abi Ligl	nt		Sect	ion, Township, Ra	nge: N	٩		
Landform (hillslope, terr	race, etc.):	Flat	Local	l relief	(concave, convex,	none):	Undulating	Slope (%):	1 to 3
Subregion (LRR or MLRA	A): LRR L			Lat:	42.8343966856	Long:	-74.4915889982	Datum: W	'GS84
Soil Map Unit Name:	Fluvaquents,	loamy					NWI classifica	tion: None	
Are climatic/hydrologic	conditions on	the site typical for	r this time of year?		Yes 🟒 No 🔄	(If no	, explain in Remark	<s.)< td=""><td></td></s.)<>	
Are Vegetation, S	Soil _∠ , Soil,	or Hydrology or Hydrology	significantly disturbe naturally problemati	ed? ic?	Are "Normal ((If needed, ex	Circumst plain an	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 _	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	e present. Circumstances are not normal due to agricul	tural activities.

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	<u>e is required; check all t</u>	<u>hat apply)</u>	Secondary Indicators (minimum of	of two required)
 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-5 Aquatio Marl Da Hydrog Oxidize Presen Recent Thin M agery (B7) Other (rface (B8)	Stained Leaves (B9) : 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)	 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) 	nagery (C9) 1)
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
Describe Recorded Data (stream ga Remarks: The criterion for wetland hydrolog	auge, monitoring well, a	erial photos, previous inspections), if	available: observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-11_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That	0	(A)
1		<u> </u>		- Total Number of Dominant Species		
2.		<u> </u>		- Across All Strata:	′ 1	(B)
3.				Percent of Dominant Species That		(4 (D)
4				Are OBL, FACW, or FAC:	0	(A/B)
5				Prevalence Index worksheet:		
o				- <u>Total % Cover of:</u>	<u>Multiply</u>	<u>By:</u>
7.		- Total Cov		- OBL species 0	x 1 =	0
Sanling/Shrub Stratum (Plot cize: 15 ft)	0	_ 10tal Cove	21	FACW species 5	x 2 =	10
<u>sapiing/stirub stratum</u> (Plot size. <u>15 it</u>)				FAC species 0	x 3 =	0
·				- FACU species 17	x 4 =	68
2.				UPL species 0	x 5 =	0
3.				- Column Totals 22	(A)	78 (B)
4				Prevalence Index = B/A =	3.5	
5				- Hydrophytic Vegetation Indicators:		
o				1- Rapid Test for Hydrophytic	Vegetatior	า
7		Tatal Car		2 - Dominance Test is > 50%		
	0	= lotal Cove	er	3 - Prevalence Index is ≤ 3.0^1		
Herb Stratum (Plot size: <u>5 ft</u>)	75		NU	4 - Morphological Adaptations	s¹ (Provide	supporting
		Yes	NI	- data in Remarks or on a separate s	heet)	
2. Parthenocissus quinquefolia		<u>N0</u>	FACU	Problematic Hydrophytic Veg	etation ¹ (E	xplain)
3. Lysimachia nummularia		No	FACW	Indicators of hydric soil and wetland	nd hydrolo	gy must be
4. <i>Taraxacum officinale</i>	2	No	FACU	_ present, unless disturbed or proble	ematic	
5.				Definitions of Vegetation Strata:		
6.				Tree – Woody plants 3 in. (7.6 cm) of	or more in	diameter at
7				breast height (DBH), regardless of	neight.	
8		<u> </u>		Sapling/shrub – Woody plants less	than 3 in. I	DBH and
9				greater than or equal to 3.28 it (1)	II) LdII. Nalanta ra	gardlace of
10		<u> </u>		- size and woody plants less than 3) piants, re 28 ft tall	gardiess of
11		<u> </u>		- Woody vines - All woody vines greater	ater than 3	28 ft in
12		<u> </u>		- height.		.2010111
	97	= Total Cove	er	Hydrophytic Vegetation Present?	Voc I	
Woody Vine Stratum (Plot size: <u>30 ft</u>)				hydrophytic vegetation Present?	ies i	NO <u>7</u>
1		<u> </u>		-		
2				-		
3				-		
4				_		
	0	= Total Cove	er			
Remarks: (Include photo numbers here or on a separa Active agricultural field.	 ate sheet.)					

SOIL

Color (moist) % Color (moist) % Type1 Loc2 Texture Ren 0 - 10 10YR 3/2 100	narks
0 - 10 10YR 3/2 100 Silty Clay Loam 10 - 20 10YR 3/3 100 Sandy Loam 10 - 20 10YR 3/3 Sandy Loam Sandy Loam 10 - 20 10YR 3/3 Indicators Indicators 11 Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLR 12 - Histosol (A1) Polyvalue Below Surface (S9) (LRR K, NLRA 149B) 2 cm Muck (A10) (LRR K, L, MLR 14 - Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) 2 cm Muck (A10) (LRR K, L) 12 - Bark Surface (S7) Depleted Matrix (F2) Dark Surface (S7)	
10 - 20 10YR 3/3 100 Sandy Loam 10 - 20 10YR 3/3 100 Indicators: 10 - 20 10YR 3/3 Indicators for Problematic Hydric Sand Grains. *Location: PL = Pore Lining, M = Matrix Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Indicators for Problematic Hydric Sand Grains. 2 cm Muck (A10) (LRR K, L, MLR Histosol (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) 2 cm Muck (A10) (LRR K, L, MLR Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LR R, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S0) (LR K, L) <	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Indicators for Problematic Hydric S2 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 Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) 5 cm Mucky Peat or Peat (S3) (LR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S6) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S0) (LR K, L)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	ioils ³ :
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	ioils ³ :
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	ioils ³ :
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	ioils ³ :
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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 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 (S0) (LRR K, L)	ioils ³ :
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S 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)	ioils ³ :
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 2 Location: PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric S Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 1498) 2 cm Muck (A10) (LRR K, L, MLR Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 1498) 2 cm Muck (A10) (LRR K, L, MLR 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 (S6) (L Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (L R K, L)	ioils ³ :
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 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 (F6)	SUIS":
Coast Prairie Redox (A16) (LRR 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 Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Matrix (F3) Depleted Below Dark Surface (S9) (LRR K, L) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F6)	A 149B)
Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)Dark Surface (S7) (LRR K, L)Depleted Matrix (F3)Depleted Matrix (F3)Polyvalue Below Surface (S8) (L RR K, L)Polyvalue Below Surface (S8) (L RR K, L)	K, L, R)
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (L Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRCK, E)	-KK N, L, K)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	.RR K. L)
	_)
Thick Dark Surface (A12) Depleted Dark Surface (F/) Iron-Manganese Masses (F12) ((LRR K, L, R)
Sandy Mucky Mineral (ST)Redox Depressions (F8)Piedmont Floodplain Soils (F19)) (MLRA 149B)
Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A	., 145, 149B)
Stripped Matrix (S6)Red Parent Material (F21)	
Very Shallow Dark Surface (1F1 Dark Surface (S7) (LRR R, MLRA 149B) Other (Evaluin in Remarks)	2)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Restrictive Layer (if observed):	
Type:No Hydric Soil Present? YesNo	
Depth (inches):	

Vegetation Photos



Soil Photos



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

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		Sampling Date: 2	2021-Sept-10
Applicant/Owner: S	unEast				State: NY		Sampling Point: W-	-RDS-12_PFO-1
Investigator(s): Ryar	า Snow, Abi Lig	;ht		Sect	ion, Township, Ra	nge: N/	4	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave, convex,	none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8351141685	Long:	-74.4932099659	Datum: WGS84
Soil Map Unit Name:	Fluvaquents	, loamy					NWI classificat	ti on: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time of	of year?	Yes 🟒 No 🔄	(If no	, explain in Remark	s.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant	ly disturbed? problematic?	Are "Normal C (If needed, exp	ircumst blain an	ances" present? y answers in Remar	Yes 🟒 No ks.)

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-RDS-12
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	f one is required; check all f	that apply)		Secondary Indicators (minimum of two required)		
		Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living ice of Reduced Iron (C4) t Iron Reduction in Tilled S luck Surface (C7) (Explain in Remarks)	Roots (C3) oils (C6)	 		
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):	6			
(includes capillary fringe)						
Describe Recorded Data (stream Remarks:	n gauge, monitoring well, a	erial photos, previous insp	pections), if	available:		
The chilehon for wetland hydro	iogy is met. A positive mult	ation of wetland hydrolog	y was obser	rved (primary and secondary indicators were present)		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-12_PFO-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
	% Cover	Species?	Status	Number of Dominant Species That		5	(A)
1. <i>Ulmus americana</i>	60	Yes	FACW	Are OBL, FACW, or FAC	: 		
2. <i>Salix alba</i>	30	Yes	FACW	Across All Strata:		5	(B)
4.				Percent of Dominant Species That		100	(A/B)
5				Prevalence Index work	sheet:		
6				Total % Cover	of.	Multiply	Bv.
7				- OBL species	0	x 1 =	
	90	= Total Cov	er	EACW species	270	×2=	540
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				EAC species	0	×2- -	0+0
1. Cornus amomum	65	Yes	FACW		0	×	0
2.					0		0
3.				Column Totala	0	x 5 = -	U
4.					270	(A) _	540 (B)
5.				Prevalence In	1 dex = B/A =	2	
6.				Hydrophytic Vegetation	n Indicators:		
7.				☐ 1- Rapid Test for Hydrophytic Vegetation			
	65	= Total Cov	er	✓ 2 - Dominance Test is >50%			
Herb Stratum (Plot size: <u>5 ft</u>)		-		3 - Prevalence Inc	dex is $\leq 3.0^{\circ}$		
1. <i>Salix alba</i>	35	Yes	FACW	4 - Morphological	Adaptations	(Provide	supporting
2. Impatiens capensis	25	Yes	FACW	Problematic Hydr	a separate si	tation1 (Ex	(nlain)
3. Cornus amomum	20	No	FACW	1Indicators of hydric sc	il and wotland		gy must bo
4. Lysimachia nummularia	15	No	FACW	present, unless disturb	ed or probler	matic	gy must be
5. <i>Onoclea sensibilis</i>	10	No	FACW	Definitions of Vegetation	on Strata:		
6. <i>Phalaris arundinacea</i>	10	No	FACW	Tree – Woody plants 3	in. (7.6 cm) or	more in	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	(non-woody)	plants, re	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All woo	dy vines great	er than 3	.28 ft in
	115	= Total Cov	al Cover height.				
Woody Vine Stratum (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetatic	on 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 \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Profile Des	cription: (Describe (to the	depth needed to a	docum	nent the	indicato	r or confirm the al	bsence of indicators.)
Depth	Matrix		Redox	Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 14	10YR 4/1	90	10YR 4/4	10	<u> </u>	 M	Clav	
14 - 20	N 4/	75	5YR 4/6	25		M	Sandy Cla	av
			511(1/0				Sundy Ch	
				—				
				—				
				—				
$^{1}Type \cdot C = C$	oncentration D =	Denlet	ion RM = Reduce	d Mat	rix MS =	Masked	Sand Grains 2	ocation: PI = Pore Lining M = Matrix
Hydric Soil	Indicators:	Depier			11, 1113	mashed		Indicators for Problematic Hydric Soils ³
			Debarahua Br		urfaca (C			
	I(AI)			siow 5			R, WILKA 149D)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
HISUC E	Sipedon (AZ)			irrace	(59) (LRF	(R, MILK	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
	ISUC (AS)				teral (F1)	(LKK K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hyuroge	d Lavora (AE)		Loanly Gleye		(FZ)			Dark Surface (S7) (LRR K, L)
Stratine	d Dalaw Dark Surfr	co (11	Depieteu Ma	Surfa	ΓΟ) CO (Γ(C)			Polyvalue Below Surface (S8) (LRR K, L)
Depiete	ark Surface (A12)	ice (Al	Doploted Dark		rfaco (E7	`		Thin Dark Surface (S9) (LRR K, L)
THICK Do	Ark Suriace (Arz)		Depieted Da	irk Su)		Iron-Manganese Masses (F12) (LRR K, L, R)
			Redox Depr	essior	IS (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	leyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)							Red Parent Material (F21)
Stripped	d Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	irface (S7) (LRR R, M	ILRA 1	49B)					Other (Explain in Remarks)
a. I								
Indicators	of hydrophytic veg	etatior	h and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	d or problematic.
Restrictive	Layer (if observed):							
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks:								
A positive in	ndication of hydric	soil wa	as observed. The o	riterio	on for hy	dric soil	is met.	
					,			

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	City/County: Sprakers,	Montgo	mery	Sampling Date: 2021-Sept-10					
Applicant/Owner: S	unEast				State: NY		Sampling Point: W-RDS-12_UPL-1		
Investigator(s): Ryan Snow, Abi Light Section, Township, Range: NA									
Landform (hillslope, te	rrace, etc.):	Flat	Local	l relief (o	oncave, convex,	none):	Undulating	Slope (%): 1 to 3	
Subregion (LRR or MLR	RA): LRR	_		Lat:4	2.835116	Long:	-74.493357	Datum: WGS84	
Soil Map Unit Name:	Phelps grave	elly loam, fan					NWI classifica	tion: None	
Are climatic/hydrologic	conditions o	n the site typical f	or this time of year?		Yes 🟒 No 🔄	(If no	, explain in Remark	:s.)	
Are Vegetation 🟒,	Soil 🟒,	or Hydrology	significantly disturbe	ed?	Are "Normal C	ircumst	ances" present?	Yes 🟒 No	
Are Vegetation,	Soil,	or Hydrology	_ naturally problemati	ic?	(If needed, exp	olain an	y answers in Remar	·ks.)	

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	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 on	e is required; check all that apply)	Secondary Indicators (minimum of two required)		
 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-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) agery (B7) Other (Explain in Remarks) 	 Surface Soli 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)	Yes No _∠ Depth (inches): Yes No _∠ Depth (inches): Yes No _∠ Depth (inches):			
Remarks: The criterion for wetland hydrology	/ is not met. No positive indication of wetland hydrology wa	s observed.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-12_UPL-1

Tree Stratum (Plot cize: 20 ft)	Absolute	Dominant	Indicator	Dominance Test workshee	t:		
	% Cover	Species?	Status	Number of Dominant Spec	ies That	0	(A)
1				Are OBL, FACW, or FAC:			
2				Total Number of Dominant	Species	1	(B)
3				Across All Strata:			
4				Percent of Dominant Speci	es That	0	(A/B)
5				Provalence Index worksho	at:		
6				Total % Cover of	Ξί.	Multiply	Bvr
7				OBL species	0	× 1 =	<u> </u>
	0	= Total Cov	er	FACW species	0	×2=	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				EAC species	0	×2- 	0
1.					0	×J- ×4-	0
2.					0	x 4 -	0
3.				Celumn Tetele	0	x 5 =	0
4.					0	(A)	0 (B)
5.				Prevalence Index	(= B/A =		
6.		· ·		Hydrophytic Vegetation Inc	dicators:		
7.				1- Rapid Test for Hydr	rophytic V	'egetatior	ı
	0	= Total Cov	er	2 - Dominance Test is	> 50%		
Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Index i	s ≤ 3.0 ¹		
1. Glycine max	95	Yes	NI	4 - Morphological Ada	aptations ¹	(Provide	supporting
2				data in Remarks or on a se	parate sh	eet)	
3		<u> </u>		Problematic Hydroph	iytic Vege	tation ¹ (E:	xplain)
4		<u> </u>		Indicators of hydric soil an	nd wetlan	d hydrold matic	igy must be
5				Present, unless disturbed of	or probler	nauc	
				Tree Weeds release 2 in (7	trata:		
7		<u> </u>		hread hough the state of the st	7.6 Cm) Or dlocc of b	more in	diameter at
/		<u> </u>		Sanling/shrub - Woody pla	inte lace ti	han 3 in 1	DBH and
o		<u> </u>		greater than or equal to 3.	28 ft (1 m) tall.	DDITAIL
		<u> </u>		Herb – All herbaceous (nor	n-woodv)	, sant plants, re	gardless of
10		<u> </u>		size, and woody plants less	than 3.2	8 ft tall.	8
12		<u> </u>		Woody vines – All woody vi	ines great	er than 3	8.28 ft in
12	05	- Total Cov	or.	height.	_		
	95	- 10tal Cov	er	Hydrophytic Vegetation Pr	resent?	/es l	No 🖌
<u>woody vine Stratum</u> (Plot size: <u>30 ft</u>)							
1		<u> </u>					
2.		<u> </u>					
3	. <u> </u>	<u> </u>					
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separat	e sheet.)						
Active agricultural field. No positive indication of hydro	phytic vege	etation was	observed (≥	≥50% of dominant species in	dexed as	FAC– or c	drier).

SOIL

Color (moist) % Color (moist) % Total (moist) %	Profile Desc Depth	ription: (Describe t Matrix	to the de	pth needed to d Redox	ocum Feat	ient the i	ndicato	r or confirm the al	bsence of indicato	rs.)	
0-14 10YR 3/4 100 Silty Clay Loam 0-14 10YR 3/4 100 Silty Clay Loam 10YR 3/4 100 Silty Clay Loam Image: Class of the second s	(inches)	Color (moist)	%	Color (moist)	%	Type ¹	L OC ²	Text	ure		Remarks
Image: Section of the section of th	0 - 14	10YR 3/4	100			<u>.,)pc</u>		Silty Cla	v Loam		Remarks
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location; PL = Pore Lining, M = Matrix. Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1498) Indicators for Problematic Hydrix Solis*: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1498)	<u> </u>								<u> </u>		
Type: C = concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. >Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histosoil (A1) Polyvalue Below Surface (S3) (LRR K, MLRA 1498) Histosoil (A2) Thin Dark Surface (S3) (LRR K, MLRA 1498) Black Histic (A3) Loarny Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Depleted Below Dark Surface (F3) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gieved Matrix (F3) Polybal me Below Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Kadxa (S3) Polybal me Redux Surface (F7) Sandy Radxa (S3) Polybal me Redux Surface (F7) Dark Surface (F12) (LRR K, L) Polybal me Redux Surface (F12) Dark Surface (S12) Polybal me Redux Surface (F12) Sandy Radxa (S3) Polybal me Redux Surface (F12) Dark Surface (F12) Polybal me Radx Surface (F12) Dark Surface (S12) Polybal me Radx Surface (F12) Dark Surface (S12) <td></td>											
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. "Hydric Soll Indicators: Indicators for Problematic Hydric Solls*: Histospiedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 1499)						·					
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Zlocation: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histocol (A1)	<u> </u>		·								
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histoso (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1499) 2 cm Muck (A10) (LRR K, L, MIRA 1499) Histos (A1) Loamy Mucly Mineral (F1) (LRR K, L)	<u> </u>		·								
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soll Indicators:			·		· —						
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histos (L(1) Polyvalue Below Surface (S8) (LRR R, MLRA 1498)			·		· —						
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators:			·		-	·					
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S9) (LRR K, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histosol (A2) Thin Dark Surface (S9) (LRR K, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Black Histic (A3) Loamy Gleyed Matrix (F2) 5 cm Mucky Pear or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Polyvalue Below Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Peletom Hoodplain Solis (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Depressions (F8) Peletom Hoodplain Solis (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Alt 149B) Mesic Spodit (F06) (MLRA 144, 145, 149B) Sandy Mucky Mineral (S1) Redox (S5) Red Parent Material (F21) Stripped Matrix (S4) Mesic Spodit (F06) (MLRA 144, 145, 149B) Sandy Mucky Mineral (S1) Polyvalue Below Surface (F7) Mesic Spodit (F06) (MLRA 144, 145, 149B) Stripped Matrix (S6) Pelphic (Matrix (S4) Pelphic (Material (S1) (MLR A 149B)					· —	<u> </u>					
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location; PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators: Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Scatter fairing Redox (A16) (LRR K, L, R) Phydrogen Sulfde (A4) Loamy Gleved Matrix (F2) Depleted Matrix (F2) Startified Layers (A5) Depleted Dark Surface (F6) Thin Dark Surface (F6) Thick Dark Surface (A11) Redox Depressions (F8) Polyvalue Below Surface (S5) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Predmont Floodplain Solis (F19) (MLRA 1448) Sandy Redox (S5)			·								
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: — Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epigedon (A2)			·		· —						
ryper: < contentration, D = Depletion, RM = Reduce Midrix, MS = Masked Sand Orants Vocation, D = Depletion, Solis*;	1T			. DM - Deduced			Maaliad	Canal Craine 21	Di - Dava	Lining M - N	Antoire
Histos (A)	- Type: C = C	oncentration, D = I	Depietio	n, kivi = keauced	wati	ix, IVIS =	wasked	Sanu Grains. ² Le	ucation: PL = Pore		vidu IX.
Insusor (x1)	Hyaric Soil	nuicators:		Dobaseline Del		urface (C	0) / רי ו		indicators for Pr	oblematic Hy	yuric Solis ³ :
Inition Carlos Surface (37) (LRR K, L, R) Black Histis (CA) Loamy Mucky Mineral (F1) (LRR K, L) Straffied Layers (A5) Depleted Matrix (F2) Depleted Matrix (F3) Depleted Bow Surface (A12) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S6) Sandy Redox (S5) Sandy Redox (S5) Dark Surface (S7) (LRR K, L, R) Mesic Spodic (TA6) (MLR 149B) Sandy Gleyed Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR K, L, R) Mesic Spodic (TA6) (MLR 144B) Sandy Gleyed Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR K, L, R) Mesic Spodic (TA6) (MLR 144A, 145, 149B) Sandy Gleyed Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Type: None Hydric Soil Present? Yee No Pertification of hydric soils was observed. The criterion for hydric soil is not met.	Listic Fr	(AI)		Polyvalue Bel	UW S	uriace (S	o)(LKK	K, WILKA 149B) A 170B)	2 cm Muck (A	A10) (LRR K, I	., MLRA 149B)
	Black Hi	stic (A3)			/ Min	(59) (LKK eral (E1)	IRRKI	4 149D) \	Coast Prairie	Redox (A16)	(LRR K, L, R)
Stratified Layers (A5) Depleted Matrix (F3) Dolyvalue Below Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L R) Polyvalue Below Matrix (S4) Medix Depressions (F8) Needox (S5) Medix Spodic (TA6) (MLRA 1449B) Redox (S5) Red Parent Material (F21) Redox Depressions (F8) Needox (S5) Needox (S6) Needox (S7) (LRR R, MLRA 149B) Needox (S7) (LRR R, MLRA 149B) Needox (S6) Needox (S7) (LRR R, MLRA 149B) Needox (S7) None Hydric Soil Present? Yes No Needox (S7) No No No positive indication of hydric soils was observed. The criterion for hydric soil is not met.	Hvdroge	en Sulfide (A4)		Loamy Gleve	d Ma	trix (F2)		-)	5 cm Mucky l	Peat or Peat	(S3) (LRR K, L, R)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) In Dark Surface (S9) (LRR K, L)	Stratifie	d Layers (A5)		Depleted Ma	trix (F	=3)			Dark Surface	e (S7) (LRR K,	
	Deplete	d Below Dark Surfa	ice (A11)	Redox Dark S	urfac	ce (F6)			Polyvalue Be	iow Surface	(58) (LKK K, L)
Sandy Mucky Mineral (S1)Redox Depressions (F8) Introduction that the states of (F2) (LRK K, L, K) Piedmont Floodplain Soils (F9) (MLRA 1448) Mesic Spodic (TA6) (MLRA 1448, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	Thick Da	ark Surface (A12)		Depleted Dar	k Sui	face (F7)					
Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Very Shallow Dark Surface (F12) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Depth (inches): None Hydric Soil Present? Yes No Depth (inches): No Mesic soils was observed. The criterion for hydric soil is not met.	Sandy N	lucky Mineral (S1)		Redox Depre	ssior	is (F8)				nodalain Soil	(F12) (LKK K, L, K) s (F19) (MI PA 1/98)
Sandy Redox (S5)Red Parent Material (F21)Red Parent Material (F21)Red Parent Material (F21) 	Sandy G	ileyed Matrix (S4)							Mesic Spodic	- (TA6) (MI RA	1444 145 149B)
Stripped Matrix (S6)Very Shallow Dark Surface (TF12)Other (Explain in Remarks) Other (Explain in Remarks) 	Sandy R	edox (S5)							Red Parent N	/aterial (F21)	(144, 143, 143 <u>0</u>)
Dark Surface (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):Hydric Soil Present? YesNo Depth (inches): Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met.	Stripped	d Matrix (S6)							Verv Shallow	Dark Surfac	e (TF12)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):	Dark Su	rface (S7) (LRR R, N	ILRA 149)B)					Other (Explai	in in Remark	s)
Restrictive Layer (if observed):	3Indicators	of hydrophytic yeg	etation a	and wetland hydr	പറം	/ must he	o nrecer	it unless disturbe	d or problematic		
Type: None Depth (inches): Hydric Soil Present? Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met.	Restrictive I	aver (if observed):	ctation		0105.	y mast by		it, unicss distarbe			
Depth (inches):	incontrative i	Type [.]		None			Hydric	Soil Present?		Yes No	
Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met.		Depth (inches):		Hone	-		ingane	Son Present.		105 <u> </u>	
No positive indication of hydric soils was observed. The criterion for hydric soil is not met.	Demonstra	Deptil (inches).									
							,				

Vegetation Photos



Soil Photos



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

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, Montgomery CountySampling Date: 2021-Sept-1					2021-Sept-10		
Applicant/Owner: S	unEast		State: NY			(Sampling Point: W-RDS-13_PEM-1			
Investigator(s): Ryar	า Snow, Abi Lig	;ht	Section, Township, Range: NA							
Landform (hillslope, te	rrace, etc.):	Depression		Local relie	ef (concave, con	ivex, none):	Concave	Slope (%): 1 to 3		
Subregion (LRR or MLF	RA): LRR	L		Lat	t: 42.834259	Long:	-74.495193	Datum: WGS84		
Soil Map Unit Name:	Appleton sil	t loam, 3 to 8 pe	rcent slopes				NWI classific	ation: None		
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 N	o (If no	, explain in Remar	·ks.)		
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally p	ly disturbed? problematic?	Are "Norn (If needec	nal Circumst l, explain an	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-RDS-13						
Remarks: (Explain alternative procedures he	re 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 t	<u>that apply)</u>		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) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)				 Surfaces Soli Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Sturation Visible on Aerial Imagery (C9) Sturated or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations:	Vos No (Dopth (inchos):				
Water Table Present?		Depth (inches):		- Wetland Hydrolomy Present? Ves / No		
Saturation Present?		Depth (inches):				
(includes capillary fringe)	ies _ 🖌 iiio	Depth (menes).		-		
Describe Recorded Data (stream a	gauge, monitoring well, a	erial photos, previous insp	pections), if	available:		
The criterion for wetland hydrolog	ʒy is met. A positive indica	ation of wetland hydrolog	y was obsei	ved (primary and secondary indicators were present).		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-13_PEM-1

	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>Iree Stratum</u> (Plot Size: <u>30 ft</u>)	% Cover	Species?	Status	Number of Dominant S	Species That	1	(Δ)
1.				Are OBL, FACW, or FAC	:		(~)
2.				Total Number of Domi	nant Species	1	(B)
3.				Across All Strata:			(2)
4.				Percent of Dominant S	pecies That	100	(A/B)
5.				Are OBL, FACW, or FAC			
6.				Prevalence Index work	sheet:		
7.				Total % Cover	<u>of:</u>	<u>Multiply</u>	<u>By:</u>
···	0	= Total Cov	/er	OBL species	25	x 1 =	25
Sanling/Shruh Stratum (Plot size: 15 ft)		_		FACW species	85	x 2 =	170
1				FAC species	0	x 3 =	0
2				FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
5				Column Totals	110	(A)	195 (B)
4				Prevalence Ir	ndex = B/A =	1.8	
o				Hydrophytic Vegetation	n Indicators:		
o				1- Rapid Test for I	- - Hydrophytic V	egetation/	
/				2 - Dominance Te	st is >50%	-	
	0	= lotal Cov	/er	3 - Prevalence Inc	lex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	(Provide	supporting
1. Phalaris arundinacea	65	Yes	FACW	data in Remarks or on	a separate sh	leet)	
2. <u>Typha latifolia</u>	20	No	OBL	Problematic Hydr	ophytic Vege	tation ¹ (Ex	(plain)
3. <i>Phragmites australis</i>	10	No	FACW	¹ Indicators of hydric so	il and wetlan	d hydrolog	gy must be
4. Onoclea sensibilis	5	No	FACW	present, unless disturb	ed or proble	matic	
5. <i>Solidago gigantea</i>	5	No	FACW	Definitions of Vegetation	on Strata:		
6. <i>Scirpus atrovirens</i>	5	No	OBL	Tree – Woody plants 3	in. (7.6 cm) oı	r more in o	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub - Woody	/ plants less t	han 3 in. D	OBH and
9				greater than or equal t	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, reg	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines – All wood	dy vines great	ter than 3.	.28 ft in
	110	= Total Cov	ver	neight.			
<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	ver				
		-					

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

Profile Des	cription: (Describe t	o the o	depth needed to	docur	nent the	indicato	r or confirm the	absence of indicators.)
Depth	Matrix		Redox	(Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 22	10YR 3/1	70	5YR 5/6	30	С	М	Clay	
		·						
		·						
		· —		·				
		· —						
		·		·		<u> </u>		
		·		·				
<u> </u>		· —		·				
		·						
				·				
¹ Type: C = 0	Concentration, D = I	Depleti	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains.	² Location: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow S	Surface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	urface	(S9) (LRF	R R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Mucl	ky Mir	neral (F1)	(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
_∕ Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (S7) (LRR K, L)
Stratifie	ed Layers (A5)		Depleted Ma	atrix (F3)			Polyvalue Below Surface (S8) (LRR K, L)
Deplete	ed Below Dark Surfa	ice (A'i	1) / Redox Dark	Surfa	ce (F6)	、 、		Thin Dark Surface (S9) (LRR K, L)
I NICK D	ark Surface (ATZ)		Depleted Da	irk Su	rtace (F7))		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M			Redox Depr	essioi	1S (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy C	Jeyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy H	Redox (S5)							Red Parent Material (F21)
Strippe	d Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, N	ILRA 14	49B)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	etatior	and wetland hyd	Irolog	y must b	e preser	nt, unless disturk	ped or problematic.
Restrictive	Laver (if observed):		, , , , , , , , , , , , , , , , , , ,		, ,		·	,
	Type:		None			Hvdric	Soil Present?	Yes 🖌 No
	Denth (inches)		Home					
Bomarke:	Depth (inches).							
A positivo i	ndication of hydric	soilwa	s observed The	ritori	on for by	dric soil	is mot	
A positive i	indication of figuric	SUII Wa	is observed. The c	Intern		une son	is met.	
l								

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	Sampling Date: 2021-Sept-10
Applicant/Owner: SunEast	State: NY	Sampling Point: W-RDS-13_UPL-1
Investigator(s): Ryan Snow, Abi Light	Section, Township, Range:	NA
Landform (hillslope, terrace, etc.): Flood Plain	Local relief (concave, convex, none): Undulating Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8340140606 Lon	g: -74.4952386954 Datum: WGS84
Soil Map Unit Name: Appleton silt loam, 3 to 8	percent slopes	NWI classification: None
Are climatic/hydrologic conditions on the site typic	cal for this time of year? Yes 🖌 No (If	no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology	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:
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 of one is required; check all that apply)	Secondary Indicators (minimum of two required)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 	 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? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable:
Remarks: The criterion for wetland hydrology is not met. No positive indication of wetland hydrology was o	bserved.

VEGETATION -- Use scientific names of plants.

Sampling Point: W-RDS-13_UPL-1

Trop Stratum (Plot cize: 20 ft)	Absolute	Dominant	Indicator	Dominance Test workshe	et:		
	% Cover	Species?	Status	Number of Dominant Sp	ecies That	0	(A)
1				Are OBL, FACW, or FAC:			
2				Iotal Number of Domina	nt Species	1	(B)
3				ACTOSS All Strata.	ciec That		
4				Are OBL. FACW. or FAC:		0	(A/B)
5				Prevalence Index worksh	eet:		
6				Total % Cover o	f:	Multiply	Bv:
7				OBL species	0	x 1 =	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
1				FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3				Column Totals	0	(A)	0 (B)
4				Prevalence Ind	ex = B/A =		0 (0)
5				Hydrophytic Vegetation I	ndicators:		
6				1- Rapid Test for Hy	drophytic V	egetation	ı
7				2 - Dominance Test	is > 50%	-8	-
	0	= Total Cov	er	3 - Prevalence Index	$i s \leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological A	daptations	(Provide	supporting
1. <i>Glycine max</i>	85	Yes	NI	data in Remarks or on a	separate sh	leet)	0
2				Problematic Hydro	ohytic Vege	tation ¹ (E>	(plain)
3				¹ Indicators of hydric soil	and wetlan	d hydrolo	gy must be
4				present, unless disturbed	d or problei	matic	
5				Definitions of Vegetation	Strata:		
6				Tree – Woody plants 3 in	. (7.6 cm) oi	more in	diameter at
7				breast height (DBH), rega	ardless of h	eight.	
8				Sapling/shrub - Woody p	lants less t	han 3 in. [OBH and
9				greater than or equal to	3.28 ft (1 m) tall.	
10				Herb – All herbaceous (n	on-woody)	plants, re	gardless of
11.				size, and woody plants le	ss than 3.2	8 ft tall.	
12.				Woody vines – All woody	vines great	ter than 3	.28 ft in
	85	= Total Cov	er	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetation	Present?	/es N	No 🔽
1.							
2.							
3.							
4.							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a constat	a sheat)	_					
Active agricultural field. No positive indication of hydro	e sneet.) phytic year	atation was	observed (>	50% of dominant species	indexed ac	EAC- or d	rior)
Active agricultural nela. No positive indication of flydro	priytic vege		טטאבו עפט (צ		muexeu dS		

SOIL

10 10YR 3/4 100	nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	e Remarks
20 10YR 4/3 75 10YR 5/6 25 C M Clay 2 <th>- 10</th> <th>10YR 3/4</th> <th>100</th> <th></th> <th>_</th> <th></th> <th></th> <th>Clay Loa</th> <th>am</th>	- 10	10YR 3/4	100		_			Clay Loa	am
Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils Image: Solution of hydric soils) - 20	10YR 4/3	75	10YR 5/6	25	С	М	Clay	
-					_				
-	-								
-									
a									
Image: Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Indicators: Indicators for Problematic Hydric Soils ³ : istosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) isto: Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) lack Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) ydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) S cm Mucky Surface (S9) (LRR K, L) epleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) ihick Dark Surface (A12) Depleted Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) andy Mucky Mineral (S1) Redox Depressions (F8)									
					—	<u> </u>			
a: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ic Soil Indicators: Indicators for Problematic Hydric Soils ³ : listic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) lack Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) ydrogen Sulfde (A4) Loamy Gleyed Matrix (F2) ratified Layers (A5) Depleted Matrix (F3) epleted Below Dark Surface (A12) Depleted Matrix (F6) ndy Mucky Mineral (S1) Redox Depressions (F8) andy Gleyed Matrix (S4) Polyvalue Below Dark Surface (S7) (LRR K, L, L) andy Gleyed Matrix (S6) Peleted Dark Surface (S7) (LRR K, L) tripped Matrix (S6) Redox Depressions (F8) actors of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. tictive Layer (if observed): None Type: None Depth (inches): None Arks: ostil reading in a conterior for hydric soil is not met. Observed soil compaction was due to agricultural for the conterior for hydric soil is not met. Observed soil compaction was due to agricultural for the conterior for hydric soil is not met. Observed soil compaction was due to agricultural for the conterior for hydric soil is not met. Observed soil compaction was due to agricultural for the conterior for hydric soil is not me					—				
e: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 2Location: PL = Pore Lining, M = Matrix. ic Soil Indicators: Indicators for Problematic Hydric Soils ³ : listosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B)					—				
ic Soil Indicators: Indicators for Problematic Hydric Soils ³ : listosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) listic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) lack Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) lydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) tratified Layers (A5) Depleted Matrix (F3) iepleted Below Dark Surface (A11) Redox Dark Surface (F6) hick Dark Surface (A12) Depleted Dark Surface (F7) andy Mucky Mineral (S1) Redox Depressions (F8) andy Redox (S5) Peleted Indem hydrology must be present, unless disturbed or problematic. tripped Matrix (S6) Wery Shallow Dark Surface (TF12) trippet Matrix (S6) Mesice Soil CTA6) (MLRA 144A, 145, 149 cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. tictive Layer (if observed): Type: Type: None Depth (inches): Hydric Soil Present? arks: ositive indication of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural discultural disculture disculture disculture discultural disculture disculture discultu		 Concentration_D =	Depleti	n RM = Reducer	Mat	rix MS =	Masked 9	Sand Grains 21	ocation: PL = Pore Lining M = Matrix
istosol (A1)Polyvalue Below Surface (S8) (LRR R, MLRA 149B) istosol (A2)Thin Dark Surface (S9) (LRR R, MLRA 149B) lack Histic (A3)Loamy Mucky Mineral (F1) (LRR K, L) ydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)To mucky Peat or Peat (S3) (LRR K, L, R) tratified Layers (A5)Depleted Matrix (F3)Dork Surface (S7) (LRR K, L)Dork Surface (S9) (LRR K, L)	ic Soil	Indicators:	Depice			<i></i> ,			Indicators for Problematic Hydric Soils ³ :
Itistic Epipedon (A2)	listoso	l (A1)		Polyvalue Be	low S	urface (S	8) (LRR R	, MLRA 149B)	2 cm Muck (A10) (I PP K MI PA 149P)
Idack Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L, R Iydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) S cm Mucky Peat or Peat (S3) (LRR K, L) Itratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, L) Itel Deleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Itel Deleted Dark Surface (S11) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, F) andy Gleyed Matrix (S4) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L) andy Redox (S5) Red Parent Material (F21) Nersion Surface (TF12) tripped Matrix (S6) Nother (Explain in Remarks) Nother (Explain in Remarks) cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Nother (Explain in Remarks)	listic E	pipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLRA	149B)	Coast Prairie Redox (A16) (I RR K I R)
lydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)S in Mickly 1 cat of Near (S2) (LRR K, L) tratified Layers (A5)Depleted Matrix (F3)Dark Surface (S7) (LRR K, L) bepleted Below Dark Surface (A11)Redox Dark Surface (F6)Thin Dark Surface (S9) (LRR K, L) hick Dark Surface (A12)Depleted Dark Surface (F7)Thin Dark Surface (S9) (LRR K, L, I andy Mucky Mineral (S1)Redox Depressions (F8)Neice Spodic (TA6) (MLRA 144A, 145, 149 andy Redox (S5)	3lack H	istic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L)		5 cm Mucky Peat or Peat (S3) (I BB K B)
tratified Layers (A5) Depleted Matrix (F3)Polyvalue Below Surface (S8) (LRR K, L)Polyvalue Below Surface (S8) (LRR K, L)Polyvalue Below Surface (S8) (LRR K, L)Polyvalue Below Surface (S9) (LRR K, L)	Hydrog	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S7) (I RR K 1)
bepleted Below Dark Surface (A11) Redox Dark Surface (F6) hick Dark Surface (A12) Depleted Dark Surface (F7) andy Mucky Mineral (S1) Redox Depressions (F8) andy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 149) andy Redox (S5) Red Parent Material (F21) tripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. rictive Layer (if observed): Type: None Depth (inches): Hydric Soil Present? Yes No Yes No	tratifie	ed Layers (A5)		Depleted Ma	trix (I	-3)			Polyvalue Below Surface (S8) (I RR K 1)
hick Dark Surface (A12)Depleted Dark Surface (F7)Irin But Surface (B7) (LRR K, L, I andy Mucky Mineral (S1)Redox Depressions (F8)Iron-Manganese Masses (F12) (LRR K, L, I Piedmont Floodplain Soils (F19) (MLRA 14 Mesic Spodic (TA6) (MLRA 144A, 145, 149 Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. rictive Layer (if observed): 	Deplete	ed Below Dark Surf	ace (A11) Redox Dark !	Surfa	ce (F6)			Thin Dark Surface (S9) (I RR K 1)
andy Mucky Mineral (S1)	hick D	ark Surface (A12)		Depleted Da	rk Su	rface (F7)			Iron-Manganese Masses (F12) (I RR K. L. R)
andy Gleyed Matrix (S4)	Sandy N	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)			Piedmont Floodplain Soils (F19) (MLRA 149
andy Redox (S5)	Sandy (Gleyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A. 145. 149B)
tripped Matrix (S6)	Sandy I	Redox (S5)							Red Parent Material (F21)
Dark Surface (S7) (LRR R, MLRA 149B) Cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. rictive Layer (if observed): Type: None Depth (inches): Present? Yes No Solution of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met. Observed soil compaction was due to agricultural bits of the criterion for hydric soil is not met.	Strippe	d Matrix (S6)							Very Shallow Dark Surface (TF12)
cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. inctive Layer (if observed): Type: None Hydric Soil Present? Yes No ✓ Depth (inches): arks: ositive indication of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural	Dark Sı	urface (S7) (LRR R, I	MLRA 14	9B)					Other (Explain in Remarks)
rictive Layer (if observed): Type:NoneHydric Soil Present? YesNo _✓ Depth (inches): arks: ositive indication of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural	icators	of hydrophytic ver	retation	and wetland hvd	rolog	v must be	e present	. unless disturbe	ed or problematic.
Type: None Hydric Soil Present? Yes No Depth (inches): arks: ositive indication of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural	rictive	Laver (if observed)):			,		,	
Depth (inches): arks: ositive indication of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural		Type:		None			Hydric S	oil Present?	Yes No _
arks: ositive indication of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural		Depth (inches):					,		
ositive indication of hydric soils was observed. The criterion for hydric soil is not met. Observed soil compaction was due to agricultural	arks:								
	ositive	indication of hvdi	ric soils v	was observed. Th	e crite	rion for	hvdric soi	il is not met. Ob	served soil compaction was due to agricultural
ities.	vities.								



Soil Photos

Photo of Sample Plot North



Photo of Sample Plot East

Photo of Sample Plot South



Photo of Sample Plot West
City/County: Canajoharie, Montgomery County Sampling Date: 2023-5-3
State: NY Sampling Point: W-RDS-14_PFO-1
Section, Township, Range:
Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>0 to 1</u>
Lat: <u>42.8851250466</u> Long: <u>-74.542355938</u> Datum: <u>WGS84</u>
NWI Classification:
i year? Yes 🗶 No (If no, explain in Remarks.)
ntly disturbed? Are "Normal Circumstances" present? Yes X No
problematic? (If needed, explain any answers in Remarks.)
ng sampling point locations, transects, important features, etc.
Is the Sampled Area within a Wetland? Yes X No
If ves. optional Wetland Site ID: W-RDS-14
port.)
y) Secondary Indicators (minimum of two required) eaves (B9) Surface Soil Cracks (B6) 313) Drainage Patterns (B10) 15) Moss Trim Lines (B16) odor (C1) Dry-Season Water Table (C2) pheres along Living Roots (C3) X luced Iron (C4) X uction in Tilled Soils (C6) X ce (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) K FAC-Neutral Test (D5) FAC-Neutral Test (D5)
nches): <u>1</u>
nches):
nches): 0 Wetland Hydrology Present? Yes X No
otos, previous inspections), if available:

Sampling Point: W-RDS-14_PFO-1

Tree Stratum (Plot size: 30 ft radius) 1. Populus deltoides 2.	Absolute <u>% Cover</u> 65	Dominant Species? Yes	Indicator Status FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A) Total Number of Dominant Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>) Cornus racemosa Frangula alnus	65 45 20	= Total Yes Yes	Cover FAC FAC	Prevalence Index worksheet:Total % Cover of:Multiply by:OBL species 35 x 1 = 35 FACW species 85 x 2 = 170
3. Elaeagnus umbellata 4.				FAC species130 $x 3 =$ 390FACU species0 $x 4 =$ 0UPL species0 $x 5 =$ 0Column Totals:250(A)595
Herb Stratum (Plot size: <u>5 ft radius</u>) 1. <u>Solidago gigantea</u> 2. <u>Typha latifolia</u>	65 35	= Iotal Yes Yes	FACW OBL	Prevalence Index = B/A = 2.4 Hydrophytic Vegetation Indicators:
 3. Phalaris arundinacea 4. Equisetum palustre 5	<u>15</u> 5	<u>No</u> No	FACW FACW	 ✓ 2 - Dominance Test is >50% ✓ 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
7.				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 30 ft radius) 1.	120	= Total	Cover	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
3 4	0	= Total	Cover	 Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes X No
Remarks: (Include photo numbers here or on a separat No vegetation comments.	e sheet.)			

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: 9B) २)
9B) R)
K)
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_, K)
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149B)
,
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Plot Photo(s) - E:



Plot Photo(s) - S:



US Army Corps of Engineers fc2ec01b-0dc2-4885-94c0-5736ba9b834f W-RDS-14_PFO-1

Plot Photo(s) - W:



Plot Photo(s) - Hydrology:



Plot Photo(s) - Vegetation:



US Army Corps of Engineers fc2ec01b-0dc2-4885-94c0-5736ba9b834f W-RDS-14_PFO-1



Project/Site: Flat Creek	City/County: Can	ajoharie, Mont	gomery County Sa	ampling Date: <u>2023-5-3</u>
Applicant/Owner: Sun East		State: <u>NY</u>	Sampling Point:	W-RDS-14_UPL-1
Investigator(s): <u>Ryan Snow, Clare Abbatiello</u>		Sectio	n, Township, Range:	
Landform (hillslope, terrace, etc): <u>Flat</u>	_ Local relief (conc	ave, convex, nor	ne): <u>Undulating</u>	Slope (%): <u>2 to 5</u>
Subregion (LRR or MLRA):	Lat: <u>42.885043</u>	<u>89517</u> Lo	ong: <u>-74.542180588</u>	Datum: WGS84
Soil Map Unit Name:			NWI Classification	n:
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 significant	tly disturbed?	Are "Normal	Circumstances" pres	sent? Yes 🗶 No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed, e	explain any answers i	n Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ig sampling po	oint location	s, transects, imp	oortant features, etc.
Hydrophytic Vegetation Present? Yes No 🗴	Is the Sa	mpled Area		
Hydric Soil Present? Yes X No	within a	wetland?	Yes r	NO <u>*</u>
Wetland Hydrology Present? Yes No X	If yes, op	tional Wetland S	ite ID: W-RDS-14	
Remarks: (Explain alternative procedures here or in a separate repo Covertype is UPL.	ort.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	y)		Surface Soil Crac	ks (B6)
Surface Water (A1)Water-Stained Lea	aves (B9)		Drainage Patterns	s (B10)
High Water Table (A2) Aquatic ⊢auna (B:	13)		MOSS Trim Lines ((B16) Ir Table (C2)
Water Marks (R1)	15) • Odor (C1)		Cravfish Burrows	(C8)
Sediment Deposits (B2) Oxidized Rhizosp	heres along Living	Roots (C3)	Saturation Visible	on Aerial Imagery (C9)
Drift Deposits (B3)	uced Iron (C4)	10000 (22)	Stunted or Stress	ed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Redu	uction in Tilled Soils	s (C6)	Geomorphic Posit	tion (D2)
Iron Deposits (B5) Thin Muck Surface	:e (C7)		Shallow Aquitard	(D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in I	Remarks)		Microtopographic	Relief (D4)
Sparsely Vegetated Concave Surface (B8)			FAC-INEULIAI TESL	(D5)
Field Observations:				
Surface Water Present? Yes No 🗶 Depth (in	nches):			
Water Table Present? Yes No X Depth (in	nches):			
Saturation Present? Yes No X Depth (in	1ches):	Wetland Hyd	Irology Present? Ye	es <u>No X</u>
(includes capillary ininge)				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspe	ections), if availa	ble:	
Pemerke:				
No hydrology comments.				

Sampling Point: W-RDS-14_UPL-1

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 0 (A)
3.				Total Number of Dominant
4.			. <u></u>	Species Across All Strata: <u>1</u> (B)
5				That Are OBL, FACW, or FAC: 0% (A/B)
7.				Provolonce Index worksheet:
	0	= Total	Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)				Total % Cover of: Multiply by:
2				OBL species $0 \times 1 = 0$
3.				FACW species $0 \times 2 = 0$
4.				FAC species $0 \times 3 = 0$
5				FACU species $95 \times 4 = 380$
6				UPL species $0 \times 5 = 0$
/	0	- Total	Cover	Column Totals: 95 (A) 380 (B)
Herb Stratum (Plot size: 5 ft radius)	0	= Total	Cover	
1. Poa pratensis	75	Yes	FACU	
2. Trifolium pratense	15	No	FACU	Hydrophytic Vegetation Indicators:
3. Taraxacum officinale	5	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
4				2 - Dominance Test is >50%
5				3 - Prevalence Index is $\leq 3.0^1$
6				- A - Morphological Adaptations ¹ (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation ¹ (Explain)
10				
11				be present, unless disturbed or problematic.
12	95	- Total	Cover	
Woody Vine Stratum (Plot size: 30 ft radius)		= 10181	Cover	Definitions of Vegetation Strata:
1. <u> </u>				Tree – Woody plants 3 in. (7.6 cm) or more in
2.				diameter at breast beight (DBH), regardless of beight
3				Sanling/shruh – Woody plants less than 3 in DBH
4				and greater than or equal to 3.28 ft (1 m) tall.
	0	= lotal	Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in height.
				Hydrophytic Vegetation Present? Yes No _X
Remarks: (Include photo numbers here or on a separate she	eet.)			
No vegetation comments.				

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Profile Des	cription: (Describe t Matrix	o the de	oth needed to docu Redox	nent th	e indicat es	tor or c	onfirm the ab	sence of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	1 oc^2	Texture	Remarks
0 to 15	10YR 3/2	90	10YR 5/4	10	<u>. пре</u> С	 M	Gravelly Clav	Kemano
01010	101110/2		101110,1				<u>oraveny</u> enay	
		· ·						
		· ·		·				
1 			De duce d Matrix, OC					21
Type: C=Co	ncentration, D=Deple	tion, RM:	Reduced Matrix, CS	=Cover	ed or Co	ated Sa	nd Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Ind	licators for Problematic Hydric Soils ³ :
Histosol (A1) nedon (A2)		Polyvalue Be	elow Sur	race (S8) (LRR	к,	2 CM MUCK (A10) (LRR K, L, MLRA 149B)
Black His	tic (A3)		Thin Dark Su	rface (S	69) (LRR	R, MLF	RA 149B)	5 cm Muck Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		Loamy Muck	y Miner	al (F1) (L	.RR K, I	_)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5) Rolow Dark Surface ((11)	Loamy Gleye	ed Matriz	x (F2)		_	Polyvalue Below Surface (S8) (LRR K, L)
Thick Dar	k Surface (A12)	AII)	Redox Dark	Surface	(F6)		—	Iron-Manganese Masses (F12) (LRR K. L. R)
Sandy Mu	ucky Mineral (S1)		Depleted Da	rk Surfa	ce (F7)		_	Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gl	eyed Matrix (S4)		Redox Depre	essions	(F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sanuy Re Stripped I	Matrix (S6)						—	Verv Shallow Dark Surface (TF12)
Dark Surf	ace (S7) (LRR R, ML	RA 1498	5)				_	Other (Explain in Remarks)
³ Indicators of	f hydrophytic vegetati	on and w	etland hydrology mu	st be pre	esent, un	less dis	turbed or prob	ematic.
Restrictive L	_ayer (if present):							
Type: Gra	avel							
Depth (inc	:hes): <u>15</u>						H	ydric Soil Present? Yes X No
Remarks:								
No soil co	mments.							

Plot Photo(s) - N :



Plot Photo(s) - E:



Plot Photo(s) - S:



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Plot Photo(s) - W:



Plot Photo(s) - Vegetation:





Project/Site: Flat Creek Applicant/Owner: Sun East Investigator(s): Ryan Snow, Clare Abbatiello Landform (hillslope, terrace, etc): Depression Subregion (LRR or MLRA): Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation, Soil, or Hydrology significan Are Vegetation, Soil, or Hydrology naturally p SUMMARY OF FINDINGS — Attach site map showin Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	City/County: <u>Canajo</u> St Local relief (concave Lat: <u>42,88594581</u> year? Yes <u>X</u> No ttly disturbed? problematic? Ig sampling poin Is the Samp within a We If yes, optior	harie, Montgon ate: <u>NY</u> Section, T e, convex, none): 86Long: (If no, ex Are "Normal Cir (If needed, expl (If needed, expl tilocations, t bled Area tiland? hal Wetland Site I	nery County S Sampling Point: ownship, Range: <u>Concave</u> : <u>-74.544658094</u> NWI Classificatio plain in Remarks. cumstances" pres ain any answers i rransects, imp Yes X I	ampling Date: <u>2023-5-3</u> W-RDS-15_PEM-1
Remarks: (Explain alternative procedures here or in a separate representation of the separate	ort.)	<u>Sec</u>	ondary Indicators Surface Soil Crac	<u>s (minimum of two required)</u> cks (B6)
Surface Water (A1) Water-Stained Lex High Water Table (A2) Aquatic Fauna (B: X Saturation (A3) Marl Deposits (B1 Water Marks (B1) Hydrogen Sulfide Sediment Deposits (B2) Oxidized Rhizosp Drift Deposits (B3) Presence of Redu Algal Mat or Crust (B4) Recent Iron Redu Iron Deposits (B5) Thin Muck Surfac Sparsely Vegetated Concave Surface (B8) Surface (B8)	// aves (B9) 13) L5) Odor (C1) wheres along Living Ro uced Iron (C4) uction in Tilled Soils (C ce (C7) Remarks)	bots (C3) X (6) X X X X X	Drainage Pattern Moss Trim Lines Dry-Season Wate Crayfish Burrows Saturation Visible Stunted or Stress Geomorphic Posi Shallow Aquitard Microtopographic FAC-Neutral Test	(B16) (B16) (C17)
Field Observations: Surface Water Present? Yes Water Table Present? Yes Yes X No Depth (in Saturation Present? Yes Yes X No Depth (in (includes capillary fringe) Describe Recorded Data (stream gauge monitoring well, aerial pho-	nches): 1 nches): 0 nches): 0	Wetland Hydrol	ogy Present? Yo	es 🗶 No
Remarks: No hydrology comments.		ono), n avaliable.		

Sampling Point: W-RDS-15_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft radius</u>) 1.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test	workshe ant Speci	et: es	(A)	
2				Total Number of D Species Across All	ominant I Strata:	2	(F)	
4 5 6.				Percent of Domina That Are OBL, FAG	ant Speci CW, or F/	es AC: 100	(=) % (A/B)	
7.				Prevalence Index	worksh	eet:		
Sapling/Shrub Stratum (Plot size: 15 ft radius)	0	= Total	Cover	Total % Cov	er of:	Mu	Itiply by:	
1				OBL species	0	x 1 =	0	-
2				FACW species	95	x 2 =	190	_
3				FAC species	0	x 3 =	0	_
4 5.				FACU species	0	x 4 =	0	_
6.				UPL species	0	_ x 5 =	0	_
7.				Column Totals:	95	(A)	190	(B)
	0	= Total	Cover					
Herb Stratum (Plot size: 5 ft radius)	45	Vos	FACW	Prevalenc	e Index =	= B/A =	2	
Onoclea sensibilis	35	Yes	FACW	Hydrophytic Veg	etation Ir	ndicators	:	
3. Equisetum palustre	15	No	FACW	🗶 1 - Rapid Test f	or Hydroj	phytic Veg	getation	
4.				X 2 - Dominance	Test is >	50%		
5				X 3 - Prevalence	Index is ≤	≤3.0 ¹		
7.				4 - Morphologic	al Adapta	ations ¹ (P	rovide sup	oorting
8.				data in Rem	arks or o	n a separ	ate sheet)	
9				Problematic Hy	drophytic	: Vegetatio	on ¹ (Explai	n)
10 11				¹ Indicators of hydr	ic soil an	d wetland	l hydrology	must
12.				be present, unless	disturbe	d or probl	lematic.	
	95	= Total	Cover	Definitions of Ver	netation	Strata:		
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				Tree – Woody pla	nts 3 in. ((7.6 cm) o	or more in	
1				diameter		(,		
3.				at breast height (D	BH), reg	ardless of	f height.	
4.				Sapling/shrub – V and greater than o	Woody pl r equal to	lants less o 3.28 ft (1	than 3 in. I 1 m) tall.	OBH
	0	= Iotal	Cover	Herb – All herbac	eous (nor / plants le	n-woody) ess than 3	plants, reg 3.28 ft tall.	ardless
				Woody vines – A height.	ll woody v	vines grea	ater than 3	28 ft in
				Hydrophytic Vegetation Present?	Yes	X N	lo	
Remarks: (Include photo numbers here or on a separate sh No vegetation comments.	neet.)			I				

Profile Des	Matrix	to the dep	nn neeaed to docu Redo>	ment th	e indica es	tor or co	onfirm the	absence of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 6	10G 3/1	80	2.5YR 3/6	20	C	M/PL	Silty Clay	y
6 to 20	N 3/	70	10YR 2/1	30	D	М	Clay	
1			Deduced Matrix Of					21
Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, CS	S=Cover	ed or Co	ated Sa	nd Grains.	Location: PL=Pore Lining, M=Matrix.
Histosol Histosol Histosol Black His Hydrogel Stratified Depleted Thick Da Sandy G Sandy G Sandy R Stripped Dark Sur ³ Indicators c Restrictive Type: <u>No</u> Depth (ind Remarks: No soil co	(A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, MI of hydrophytic vegetat Layer (if present): the present the solution of the solution	(A11) _RA 149B ion and we	Polyvalue B MLRA 149E — Thin Dark S Loamy Muck — Loamy Gley — Depleted Ma X Redox Dark X Depleted Da _ Redox Depr	elow Sur 3) urface (\$ ky Miner ed Matri atrix (F3) Surface urk Surfa essions st be pre-	rface (S8 59) (LRR al (F1) (L x (F2) (F6) .cce (F7) (F8)) (LRR I R, MLF RR K, I	R, AA 149B) -) turbed or pr	Indicators for Problematic Hydric Soils*: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Muck 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) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) oblematic.

Plot Photo(s) - N :



Plot Photo(s) - E:



Plot Photo(s) - S:



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Plot Photo(s) - Hydrology:



Plot Photo(s) - Vegetation:





Project/Site: Flat Creek	City/County: Canajoharie, Montgomery County Sampling Date: 2023-5-3
Applicant/Owner: Sun East	State: NY Sampling Point: W-RDS-15_UPL-1
Investigator(s): <u>Ryan Snow, Clare Abbatiello</u>	Section, Township, Range:
Landform (hillslope, terrace, etc): <u>Hillslope</u>	Local relief (concave, convex, none): <u>Convex</u> Slope (%): <u>2 to 5</u>
Subregion (LRR or MLRA):	Lat: <u>42.8858876422</u> Long: <u>-74.5447142997</u> Datum: <u>WGS84</u>
Soil Map Unit Name:	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 significan	tly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area within a Wetland? Yes No 🗶
Wetland Hydrology Present? Yes No X	I If yes, optional Wetland Site ID: W-RDS-15
Remarks: (Explain alternative procedures here or in a separate rep Covertype is UPL.	ort.)
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Stained Le High Water Table (A2) Aquatic Fauna (B. Saturation (A3) Marl Deposits (B1 Water Marks (B1) Hydrogen Sulfide Sediment Deposits (B2) Oxidized Rhizosp Drift Deposits (B3) Presence of Redu Algal Mat or Crust (B4) Recent Iron Redu Iron Deposits (B5) Thin Muck Surfact Inundation Visible on Aerial Imagery (B7) Other (Explain in Sparsely Vegetated Concave Surface (B8) Other (Explain in	Secondary Indicators (minimum of two required) y) Surface Soil Cracks (B6) aves (B9) Drainage Patterns (B10) 13) Moss Trim Lines (B16) .5) Dry-Season Water Table (C2) Odor (C1) Crayfish Burrows (C8) heres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9) iced Iron (C4) Geomorphic Position (D2) e (C7) Shallow Aquitard (D3) Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (ir	iches):
Water lable Present? Yes No X Depth (in Saturation Present? Yes	iches): Wetland Hydrology Present? Yes No ¥
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho Remarks: No hydrology comments.	ntos, previous inspections), if available:

Sampling Point: W-RDS-15_UPL-1

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Iree Stratum</u> (Plot size: <u>30 ft radius</u>)	% Cover	Species?	Status	Number of Dominant Chasica
1. Pinus strobus	75	Yes	FACU	The Are OBL FACIAL or FAC: (A)
2. Fraxinus americana	20	No	FACU	That are OBL, FACW, of FAC: 0 (A)
2 Acer rubrum	10	No	FAC	Total Number of Dominant
		110		Species Across All Strata: 1 (B)
4.		·		Percent of Dominant Species
5				That Are OBL EACW/ or EAC: $(1)\%$ (A/B)
6				
7				Prevalence Index worksheet
	105	= Total	Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)		10100		Total % Cover of: Multiply by:
				\overline{OPL} species 0 $x = 0$
2				FACW species $0 \times 2 = 0$
3	<u> </u>			FAC species $10 \times 3 = 30$
4				
5.				FACU species $95 \times 4 = 380$
6		·		UPL species $0 \times 5 = 0$
0		·		Column Totals: 105 (A) 410 (B)
<i>I</i>				
	0	= Total	Cover	
Herb Stratum (Plot size: 5 ft radius)				Prevalence Index = $B/A = 3.9$
1.				
2				Hydrophytic Vegetation Indicators:
2		·		1 - Rapid Test for Hydrophytic Vegetation
3		·		
4		·		2 - Dominance Test is >50%
5				3 - Prevalence Index is $< 3.0^{1}$
6				
7.				4 - Morphological Adaptations ¹ (Provide supporting
8.				data in Remarks or on a separate sheet)
Q				
10				Problematic Hydrophytic Vegetation ² (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
^{11.}				he present unless disturbed or problematic
12				
	0	= Total	Cover	Definitions of Manatation Objects
Woody Vine Stratum (Plot size: 30 ft radius)				Definitions of Vegetation Strata:
1				Tree – Woody plants 3 in. (7.6 cm) or more in
2				diameter
2		·		at breast height (DBH), regardless of height.
3				Sanling/shruh - Woody plants less than 3 in DBH
4		·		and greater than or equal to 3.28 ft (1 m) tall
	0	= Total	Cover	
				Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
				Undranductio
				Negatation
				Vegetation
Remarks: (Include photo numbers here or on a separate she	et.)			
No vegetation comments.				
0				

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Denth	Matrix	to the dep	Redo>	<u>Fe</u> ature	es		onfirm the a	absence of indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0 to 12	10YR 4/2	100					Clav			
0.00 12	10110						Gidy			
·										
·										
·										
<u> </u>										
· ·										
·										
¹ Type: C=Cond	centration, D=Deple	etion, RM=	Reduced Matrix, CS	S=Cover	ed or Co	ated Sar	nd Grains.	² Location: PL=Pore Lining, M=	Matrix.	
Hydric Soil Ind	dicators:							Indicators for Problematic Hydri	c Soils ³	
Histosol (A	1)		Polyvalue B	elow Sur	face (S8) (LRR F	٤,	2 cm Muck (A10) (LRR K, L, M	ILRA 149)B)
Histic Epipe	edon (A2)		MLRA 1498	3)			-	Coast Prairie Redox (A16) (LR	R K, L, F	2)
Black Histic	c (A3)		Thin Dark S	urface (S	9) (LRR	R, MLR	A 149B)	5 cm Muck Peat or Peat (S3) (LRR K, L	., R)
Hydrogen S	Sulfide (A4)		Loamy Muck	y Minera od Matrix	al (F1) (L v (E2)	.RR K, L) _	Dark Surface (S7) (LRR K, L)	(I DD K	
Depleted B	ayers (A5) Below Dark Surface	(A11)	Depleted Ma	atrix (F3)	x (FZ)		-	Thin Dark Surface (S9)	(LRR R, (. L)	L)
Thick Dark	Surface (A12)		Redox Dark	Surface	(F6)		-	Iron-Manganese Masses (F12)	(LRR K	L, R)
Sandy Muc	ky Mineral (S1)		Depleted Da	ırk Surfa	ce (F7)		-	Piedmont Floodplain Soils (F1	9) (MLRA	149B)
Sandy Gley	yed Matrix (S4)		Redox Depr	essions	(F8)		-	Mesic Spodic (TA6) (MLRA 14	4A, 145,	149B)
Sandy Red Stripped Ma	IUX (S5) atrix (S6)						-	Red Parent Material (F21) Very Shallow Dark Surface (TE	12)	
Dark Surfac	ce (S7) (LRR R, MI	LRA 149B)					-	Other (Explain in Remarks))	
³ Indicators of h	hydrophytic vegetat	ion and we	tland hydrology mu	st be pre	esent, un	less dist	urbed or pr	oblematic.		
Restrictive La	ayer (if present):									
Type: <u>Not </u>	present									
Depth (inch	es):							Hydric Soil Present? Yes	No	×
Remarks [.]										
No soil com	iments.									

Plot Photo(s) - N :



Plot Photo(s) - E:



Plot Photo(s) - S:



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Plot Photo(s) - Vegetation:
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Plot Photo(s) - Soil:



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Project/Site: <u>Flat Creek</u> Applicant/Owner: <u>Sun East</u> Investigator(s): <u>Ryan Snow, Clare Abbatiello</u> Landform (hillslope, terrace, etc): <u>Depression</u> Subregion (LRR or MLRA): Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of Are Vegetation, Soil, or Hydrology significan Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS — Attach site map showin Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	City/County: <u>Canajoha</u> State Local relief (concave, o Lat: <u>42.8862297779</u> year? Yes <u>×</u> No _ ntly disturbed? A problematic? (I Is the Sample within a Wetta	arie, Montgomery County S e: <u>NY</u> Sampling Point: Section, Township, Range: convex, none): <u>Concave</u> Long: -74.54606866 NWI Classificatio (If no, explain in Remarks wre "Normal Circumstances" pre If needed, explain any answers locations, transects, im ed Area and? Yes X NU RDS 16	Sampling Date: <u>2023-5-3</u> <u>W-RDS-16_PFO-1</u> Slope (%): <u>0 to 1</u> <u>49</u> Datum: <u>WGS84</u> Datum: <u>WGS84</u> D
Remarks: (Explain alternative procedures here or in a separate rep Covertype is PFO.	ort.)		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply X Surface Water (A1) High Water Table (A2) Aquatic Fauna (B X Saturation (A3) Marl Deposits (B3) Water Marks (B1) Hydrogen Sulfide Drift Deposits (B3) Presence of Redu Algal Mat or Crust (B4) Recent Iron Redu Iron Deposits (B5) Thin Muck Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in Sparsely Vegetated Concave Surface (B8)	/) aves (B9) 13) L5) Odor (C1) oheres along Living Root uced Iron (C4) uction in Tilled Soils (C6) a (C7) Remarks)	Secondary Indicators Surface Soil Cra Drainage Patterr Moss Trim Lines Dry-Season Wat Crayfish Burrows Sturted or Stress Stunted or Stress Shallow Aquitard Microtopographi FAC-Neutral Tes	s (minimum of two required) cks (B6) ns (B10) (B16) er Table (C2) s (C8) e on Aerial Imagery (C9) sed Plants (D1) sition (D2) I (D3) c Relief (D4) t (D5)
Field Observations: Surface Water Present? Yes Water Table Present? Yes X No Saturation Present? Yes Yes X No Depth (ir Concludes capillary fringe) No Describe Recorded Data (stream gauge, monitoring well, aerial pho	nches): 1 nches): 0 nches): 0 works, previous inspectior	etland Hydrology Present? Y ns), if available:	″es_ X No
Remarks: No hydrology comments.			

Sampling Point: W-RDS-16_PFO-1

Tree Stratum (Plot size: 30 ft radius) 1. Ulmus americana 2.	Absolute <u>% Cover</u> 25	Dominant Species? Yes	Indicator Status FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 Total Number of Dominant Species Across All Strata: 3 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7	25	= Total	Cover	Prevalence Index worksheet: Total % Cover of: Multiply by:
1 2 3				OBL species0 $x 1 = 0$ FACW species90 $x 2 = 180$ FAC species0 $x 3 = 0$
4 5 6				FACU species5 $x 4 =$ 20UPL species0 $x 5 =$ 0
7	0	= Total	Cover	Column Totals: <u>95</u> (A) <u>200</u> (B)
Herb Stratum (Plot size: 5 ft radius) 1. Impatiens capensis	40	Yes	FACW	Prevalence Index = B/A = <u>2.1</u>
2. Phalaris arundinacea 3. Tussilago farfara 4. 5. 6.	<u>25</u> 5	Yes No	FACW FACU	\underline{X} 1 - Rapid Test for Hydrophytic Vegetation \underline{X} 2 - Dominance Test is >50% \underline{X} 3 - Prevalence Index is $\leq 3.0^1$
7. 8. 9. 10. 11.				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
12	70	= Total	Cover	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in
1 2 3				diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH
**	0	= Total	Cover	and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in height.
				Hydrophytic Vegetation Present? Yes X No
Remarks: (Include photo numbers here or on a separate No vegetation comments.	sheet.)			

Profile Des	le Description: (Describe to the depth needed to document the indicator or confirm th Matrix Redox Features				mirm the a	DSENCE OF INDICATORS.)		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 16	10YR 3/2	90	2.5YR 4/6	10	C	М	Clay	
				. <u> </u>				
				<u> </u>				
¹ Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, CS	S=Cover	ed or Co	ated Sar	nd Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Ir	ndicators for Problematic Hydric Soils ³ :
Histosol ((A1)		Polyvalue Be	elow Sur	rface (S8) (LRR F	ર, _	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2) stic (A3)		MLRA 149E Thin Dark Su	5) Irface (S	39) (I BB		A 149B)	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Muck Peat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		Loamy Muck	y Miner	al (F1) (L	.RR K, L	.)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	(Loamy Gley	ed Matri	x (F2)		_	Polyvalue Below Surface (S8) (LRR K, L)
Depleted	Below Dark Surface	(A11)	Depleted Ma	ttrix (F3) Surface) (E6)		_	_ Thin Dark Surface (S9) (LRR K, L)
Sandy M	ucky Mineral (S1)		Depleted Da	rk Surfa	(F7)		_	Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	leyed Matrix (S4)		Redox Depr	essions	(F8)		_	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Re	edox (S5) Matrix (S6)						_	_ Red Parent Material (F21)
Dark Sur	face (S7) (LRR R, MI	_RA 149E	3)				-	Other (Explain in Remarks)
³ Indicators o	of hydrophytic vegetat	ion and w	retland hydrology mu	st be pre	esent, un	less dist	urbed or pro	blematic.
Restrictive	Laver (if present):							
Type: No	ot present							
Depth (ind	ches):							Hydric Soil Present? Yes 🗶 No
Remarks:								
No soil co	omments.							



Plot Photo(s) - E:



Plot Photo(s) - S:



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Plot Photo(s) - S:



Plot Photo(s) - Hydrology:



Plot Photo(s) - Vegetation:



US Army Corps of Engineers 0425ea72-75b2-47c0-a32d-daaf0bef3616 W-RDS-16_PFO-1

Plot Photo(s) - Soil:



Project/Site: <u>Flat Creek</u>	City/County: Ca	najoharie, Mon	tgomery County Sa	ampling Date: <u>2023-5-3</u>
Applicant/Owner: Sun East		State: <u>NY</u>	Sampling Point:	W-RDS-16_UPL-1
Investigator(s): <u>Ryan Snow, Clare Abbatiello</u>		Secti	on, Township, Range:	
Landform (hillslope, terrace, etc): Flat	Local relief (con	cave, convex, no	one): <u>Undulating</u>	Slope (%): <u>1 to 3</u>
Subregion (LRR or MLRA):	Lat: <u>42.88624</u>	<u>80416</u> L	_ong: <u>-74.546022991</u>	5 Datum: WGS84
Soil Map Unit Name:			NWI Classification	n:
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes 🗶	No (If no	o, explain in Remarks.))
Are Vegetation, Soil, or Hydrology significant	tly disturbed?	Are "Norma	al Circumstances" pres	ent? Yes 🗶 No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed,	explain any answers in	n Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ig sampling p	oint locatior	ns, transects, imp	ortant features, etc.
Hydrophytic Vegetation Present? Yes No 🗶	Is the Sa	ampled Area	Vac	
Hydric Soil Present? Yes No 🗶	Within a	Wetianu?	res	IO <u> </u>
Wetland Hydrology Present? Yes No X	If yes, or	otional Wetland S	Site ID: W-RDS-16	
Remarks: (Explain alternative procedures here or in a separate repo Covertype is UPL.	ort.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	/)		Surface Soil Crac	ks (B6)
Surface Water (A1) Water-Stained Lea	aves (B9)		Drainage Patterns	S (B10)
High Water Table (A2) Aquatic ⊢auna (B.	13) 15)		Drv-Season Wate	B10) r Tahle (C2)
Water Marks (B1) Hydrogen Sulfide	Odor (C1)		Crayfish Burrows	(C8)
Sediment Deposits (B2)	heres along Living	g Roots (C3)	Saturation Visible	on Aerial Imagery (C9)
Drift Deposits (B3)	uced Iron (C4)	-	Stunted or Stress	ed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Redu	iction in Tilled Soil	s (C6)	Geomorphic Posit	tion (D2)
Inin Muck Surrace Inin Muck Surrace Inin Muck Surrace Other (Explain in Level 1 Other (Explain in Level 1))	e (C/) Pomarks)		Snallow Aquitaru Microtopographic	(D3) Raliaf (D4)
Sparsely Vegetated Concave Surface (B8)	Remains		FAC-Neutral Test	(D5)
				< , ,
FIEld Observations: Surface Water Present? Ves No ¥ Denth (in	nchae).			
Water Table Present? Yes No X Depth (in	nches).			
Saturation Present? Yes No X Depth (in	iches):	Wetland Hy	drology Present? Ye	es No 🗶
(includes capillary fringe)				· ·
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous insp	pections), if avail	able:	
Remarks:				
No hydrology comments.				

Sampling Point: W-RDS-16_UPL-1

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft radius</u>)	% Cover	Species?	Status	Number of Deminent Oracia
1. Pinus strobus	65	Yes	FACU	Number of Dominant Species
2 Tilia americana	35	Ves	FACU	That Are OBL, FACW, or FAC: 0 (A)
		105	11100	Total Number of Dominant
3. Fagus grandifolia	15	No	FACU	Species Agrees All Strate: 3 (P)
4.				Species Across Air Strata. <u>5</u> (B)
5				Percent of Dominant Species
· · · · · · · · · · · · · · · · · · ·				That Are OBL, FACW, or FAC: 0% (A/B)
0	·			
7				Prevalence Index worksheet:
	115	= Total	Cover	
Copling/Shrub Stratum (Diot cize: 15 ft radius)			0010.	Total % Cover of: Multiply by:
<u>Sapiniy/Shrub Stratum</u> (Plot Size. <u>15 it radius</u>)				
1				OBL species $0 \times 1 = 0$
2.				FACW species $0 \times 2 = 0$
3				
0. 	·	· <u> </u>		FAC species $0 \times 3 = 0$
4.				FACU species $130 \times 4 = 520$
5				
6.				UPL species $0 \times 5 = 0$
7				Column Totals: 130 (A) 520 (B)
· · · · · · · · · · · · · · · · · · ·				(1)
	0	= Total	Cover	
Herb Stratum (Plot size: 5 ft radius)				Prevalence Index = $B/A = 4$
1 Berberis thunbergii	15	Ves	FACU	
1. Derberis manbergi	15	105	11100	Hydrophytic Vegetation Indicators:
2.				
3				I - Rapid Test for Hydrophytic Vegetation
4.				2 - Dominance Test is >50%
5				
				3 - Prevalence Index is $≤3.0^{1}$
6				1
7.				4 - Morphological Adaptations [⊥] (Provide supporting
8.				data in Remarks or on a separate sheet)
	·	·		
9				Problematic Hydrophytic Vegetation ⁺ (Explain)
10				
11.				-Indicators of hydric soil and wetland hydrology must
12				be present, unless disturbed or problematic.
	15			
	15	= Iotal	Cover	Definitions of Vegetation Strata:
Woody Vine Stratum (Plot size: 30 ft radius)				
1.				Iree – Woody plants 3 in. (7.6 cm) or more in
2				diameter
2. 				at breast height (DBH), regardless of height.
3				Sanling/shrub - Woody plants loss than 2 in DPU
4				and greater than or agual to 2 20 ft (1 m) tall
	0	= Total	Cover	and greater than of equal to 5.26 it (1 iii) tail.
		Total	00101	Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
				Hydrophytic
				Vegetation
				Procent? Voc No X
Remarks: (Include photo numbers here or on a separate she	et.)			
No vegetation comments.				
rio vegetation comments.				

Profile Des	cription: (Describe	n: (Describe to the depth needed to document the indicator or confirm the abs Matrix Redox Features				ence of indicators.)				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0 to 16	10YR 3/2	100					Silty Clay	V		
16 to 20	10VR 5/4	90	10VR 5/8	10			<u>Clav</u>			
10 10 20	1011X 3/4		1011K 5/0	10	<u> </u>	111	Ciay			
¹ Type: C=Cc	ncentration, D=Deple	etion, RM=	Reduced Matrix, CS	=Cover	ed or Co	ated Sa	nd Grains.	² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil I	ndicators:							Indicators for Problematic Hydric Soils ³ :		
Histosol ((A1)		Polyvalue Be	elow Su	rface (S8) (LRR I	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Histic Epi	pedon (A2)		MLRA 149E	3)			-	Coast Prairie Redox (A16) (LRR K, L, R)		
Black His	itic (A3) Sulfido (A4)		Thin Dark Su	urface (S	59) (LRR al (E1) (I		A 149B)	5 cm Muck Peat or Peat (S3) (LRR K, L, R)		
Stratified	Lavers (A5)		Loamy Gleve	ed Matri	ai (F1) (E x (F2)		-)	Polyvalue Below Surface (S8) (LRR K, L)		
Depleted	Below Dark Surface	(A11)	Depleted Ma	trix (F3))		Thin Dark Surface (S9) (LRR K, L)			
Thick Dai	rk Surface (A12)		Redox Dark	Surface	(F6)		Iron-Manganese Masses (F12) (LRR K, L, I			
Sandy Mi	ucky Mineral (S1)		Depleted Da	rk Surfa	ce (F7)		Piedmont Floodplain Soils (F19) (MLRA 149			
Sandy G	edox (S5)			25510115	(го)		-	Red Parent Material (F21)		
Stripped	Matrix (S6)						-	Very Shallow Dark Surface (TF12)		
Dark Sur	face (S7) (LRR R, MI	LRA 149B)				-	Other (Explain in Remarks)		
³ Indicators o	f hydrophytic vegetat	ion and w	etland hydrology mu	st be pre	esent, un	less dist	turbed or pr	oblematic.		
Restrictive I	Layer (if present):									
Type: No	t present									
Depth (inc	ches):							Hydric Soil Present? Yes No X		
Remarks [.]										
No soil co	omments.									



Plot Photo(s) - E:



Plot Photo(s) - S:



US Army Corps of Engineers 1f1855c2-2767-459c-8db1-761dfebfed8a W-RDS-16_UPL-1



Plot Photo(s) - Vegetation:





Project/Site: Flat Creek	City/County: Sprakers, Montgomery County Sampling Date: 2023-5-3
Applicant/Owner: SunEast	State: NY Sampling Point: W-RDS-17_PEM-1
Investigator(s): Ryan Snow, Clare Abbatiello	Section, Township, Range:
Landform (hillslope, terrace, etc): Depression	Local relief (concave, convex, none): Concave Slope (%): 1 to 3
Subregion (LRR or MLRA):	Lat: <u>42.8560791936</u> Long: <u>-74.510266923</u> Datum: <u>WGS84</u>
Soil Map Unit Name: Ilion Silt Loam	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 significan	ntly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	na sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland Site ID: W-RDS-17
Remarks: (Explain alternative procedures here or in a separate rep Covertype is PEM.	iort.)
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Stained Le. X High Water Table (A2) X Aquatic Fauna (B: Marl Deposits (B1) Marl Deposits (B1) Sediment Deposits (B2) Oxidized Rhizosp Drift Deposits (B3) Presence of Redu Iron Deposits (B5) Thin Muck Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in Sparsely Vegetated Concave Surface (B8)	y) Secondary Indicators (minimum of two required) y) Surface Soil Cracks (B6) aves (B9) Drainage Patterns (B10) (13) Moss Trim Lines (B16) 15) Dry-Season Water Table (C2) c Crayfish Burrows (C8) Crayfish Burrows (C8) oheres along Living Roots (C3) X uced Iron (C4) Saturation Visible on Aerial Imagery (C9) uction in Tilled Soils (C6) Stanted or Stressed Plants (D1) ce (C7) Shallow Aquitard (D3) Remarks) X
Field Observations:	
Water Table Present? Yes No Depth (in	nches):
Saturation Present? Yes X No Depth (in (includes capillary fringe)	nches): 0 Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks: No hydrology comments.	
Sampling Point: W-RDS-17_PEM-1

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				That Are OBL, FACW, or FAC: 1 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: <u>1</u> (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7.				Prevalence Index worksheet:
	0	= Total	Cover	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft radius)				$\frac{1}{10000000000000000000000000000000000$
2.				EACW species $85 \times 2 = 170$
3.				EAC species $0 \times 3 = 0$
4				$\frac{1}{1} = \frac{1}{1} = \frac{1}$
5				FACU species $0 \times 4 = 0$
6				$\begin{array}{c} \text{OPL species} & \underline{0} & x \text{ 5} = \underline{0} \\ \text{Column Tatala:} & \underline{05} & (A) & \underline{180} & (B) \end{array}$
· · · · · · · · · · · · · · · · · · ·	0	– Total	Cover	$\begin{array}{c} \text{Column lotals:} \underline{} (A) \underline{} (B) \end{array}$
Herb Stratum (Plot size: 5 ft radius)		- 10181	Cover	Prevalence index = $B/A = -1.9$
1. Solidago gigantea	75	Yes	FACW	
2. Onoclea sensibilis	10	No	FACW	Hydrophytic Vegetation Indicators:
3. Carex typhina	10	No	OBL	1 - Rapid Test for Hydrophytic Vegetation
4				<u>X</u> 2 - Dominance Test is >50%
5				X 3 - Prevalence Index is $\leq 3.0^1$
7.				4 - Morphological Adaptations ¹ (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
12	95	= Total	Cover	
Woody Vine Stratum (Plot size: 30 ft radius)		10104	0010	Definitions of Vegetation Strata:
1				Tree – Woody plants 3 in. (7.6 cm) or more in
2				at breast height (DBH), regardless of height.
3				Sapling/shrub – Woody plants less than 3 in. DBH
4	0	– Total	Cover	and greater than or equal to 3.28 ft (1 m) tall.
		- 1014	Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in height.
				Hydrophytic Vegetation Present? Yes X No
Remarks: (Include photo numbers here or on a separate sl	neet.)			
No vegetation comments.				

Profile Des	cription: (Describe Matrix	to the dep	tn needed to docu Redox	ment th Feature	e indicat es	or or co	onfirm the a	absence of indicators.)
Depth <u>(inches)</u>	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 12	10YR 3/1	95	2.5YR 3/4	5	С	М	Silt Loan	1
12 to 20	10YR 4/2	90	5YR 5/6	10	С	M	Silty Clay	y
¹ Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS	=Cover	ed or Co	ated Sa	nd Grains.	² Location: PL=Pore Lining, M=Matrix.
Histosol (Histoc Epi Black His Hydroger Stratified Depleted Thick Dai Sandy Mi Sandy Gi Sandy Re Stripped Dark Surf	(A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, Mi	(A11) L RA 149B	Polyvalue Be MLRA 149E Thin Dark St Loamy Muck Depleted Ma Redox Dark Redox Depre	elow Sur a) urface (S cy Miner- ed Matri: trix (F3) Surface rk Surfa essions	face (S8 59) (LRR al (F1) (L × (F2) (F6) ce (F7) (F8)) (LRR I R, MLR RR K, L	R, 149B)	A construction of the problematic Hydric Solis*: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Muck 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) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Restrictive	aver (if present):	lon and w	elianu nyurology mu	st be pre	esent, un		uibeu oi pi	obiematic.
Type: No	t present							Hydric Soil Present? Yes 🗶 No
Remarks: No soil cc	omments.							

Plot Photo(s) - N :



Plot Photo(s) - E:



Plot Photo(s) - S:



US Army Corps of Engineers aee84378-b9b3-4897-b282-420b789b99ae W-RDS-17_PEM-1



Plot Photo(s) - Hydrology:





Project/Site: Flat Creek	City/County: Sprakers, Montgomery County Sampling Date: 2023-5-3
Applicant/Owner: SunEast	State: NY Sampling Point: W-RDS-17 UPL-1
Investigator(s): Ryan Snow, Clare Abbatiello	
Landform (hillslope, terrace, etc): Flat	Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA):	Lat: 42.8559431574 Long: -74.5101473854 Datum: WGS84
Soil Map Unit Name: Ilion	NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significan	ntly disturbed? Are "Normal Circumstances" present? Yes 🗴 No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Area within a Wetland? Yes No X If yes, optional Wetland Site ID: W-RDS-17
Remarks: (Explain alternative procedures here or in a separate rep Covertype is UPL.	ort.)
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Stained Le High Water Table (A2) Aquatic Fauna (B. Saturation (A3) Marl Deposits (B1 Water Marks (B1) Hydrogen Sulfide Sediment Deposits (B2) Oxidized Rhizosp Drift Deposits (B3) Presence of Redu Algal Mat or Crust (B4) Recent Iron Redu Iron Deposits (B5) Thin Muck Surfact Inundation Visible on Aerial Imagery (B7) Other (Explain in Sparsely Vegetated Concave Surface (B8) Other (Explain in	y) Secondary Indicators (minimum of two required), y) Surface Soil Cracks (B6) iaves (B9) Drainage Patterns (B10) i13) Moss Trim Lines (B16) 15) Dry-Season Water Table (C2) icodor (C1) Crayfish Burrows (C8) icodor (C4) Saturation Visible on Aerial Imagery (C9) iction in Tilled Soils (C6) Geomorphic Position (D2) ice (C7) Shallow Aquitard (D3) Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🗶 Depth (ir	nches):
Water Table Present? Yes No Depth (ir	nches):
(includes capillary fringe)	ncnes): Wetland Hydrology Present? res No
Describe Recorded Data (stream gauge, monitoring well, aerial pho Remarks: No hydrology comments.	otos, previous inspections), if available:

Sampling Point: W-RDS-17_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft radius</u>) 1.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Porcent of Dominant Species
5				That Are OBL, FACW, or FAC: 0% (A/B)
7.				
	0	= Total	Cover	Prevalence index worksneet:
Sapling/Shrub Stratum (Plot size: 15 ft radius)				Total % Cover of: Multiply by:
1				OBL species x 1 =0
2				FACW species x 2 =0
4.				FAC species $0 \times 3 = 0$
5.				FACU species <u>100</u> x 4 = <u>400</u>
6.				UPL species $0 \times 5 = 0$
7				Column Totals: <u>100</u> (A) <u>400</u> (B)
	0	= Total	Cover	
Herb Stratum (Plot size: 5 ft radius)			EA CU	Prevalence Index = B/A =
1. Poa pratensis	20	Yes	FACU	Hydrophytic Vegetation Indicators:
2. Solidado canadonsis		No	FACU	1 - Rapid Test for Hydrophytic Vegetation
	10	110	FACU	2 - Dominance Test is >50%
5.				
6.				3 - Prevalence Index is ≤3.0 [⊥]
7.				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation ¹ (Explain)
			<u> </u>	¹ Indicators of hydric soil and wetland hydrology must
12			·······	be present, unless disturbed or problematic.
12.	100	= Total	Cover	
Woody Vine Stratum (Plot size: 30 ft radius)		Total	0000	Definitions of Vegetation Strata:
1				Tree – Woody plants 3 in. (7.6 cm) or more in
2				at breast height (DBH), regardless of height.
3				Sanling/shrub – Woody plants less than 3 in DBH
4				and greater than or equal to 3.28 ft (1 m) tall.
	0	= Iotal	Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in height.
				Hydrophytic
				Vegetation Present? Yes No
Remarks: (Include photo numbers here or on a separate she	et.)			1
No vegetation comments.	,			

US Army Corps of Engineers 1d7049ce-21ac-4331-84da-dad73a8ac577 W-RDS-17_UPL-1

Profile Des	cription: (Describe Matrix	to the dep	th needed to docu Redox	ment th Featur	ie indica es	tor or c	onfirm the ab	sence of indicators.)	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0 to 5	10YR 3/2	100					Fibric Silt Loar	n	
5 to 18	10YR 3/2	95	5YR 3/4	5	С	M/PL	Silty Clay Loar	n	
				. <u> </u>					
							·		
							·		
1			Deduced Metrix C					2	
+Type: C=Co	Indicators:	etion, RM=	Reduced Matrix, CS	S=Cove	red or Co	ated Sa	and Grains.	² Location: PL=Pore Lining, M=Matrix.	
Histosol ((A1)		Polyvalue B	elow Su	rface (S8	B) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149E	3)
Histic Epi	ipedon (A2)		MLRA 149	3)	00) () 5 5			Coast Prairie Redox (A16) (LRR K, L, R)	-
Black His	stic (A3) n Sulfide (A4)		Thin Dark S	urface (3 vv Minei	S9) (LRF al (E1) (R, ML	RA 149B) L)	5 cm Muck Peat or Peat (S3) (LRR K, L, Dark Surface (S7) (LRR K, L)	R)
Stratified	Layers (A5)		Loamy Gley	ed Matr	ix (F2)	,	-)	Polyvalue Below Surface (S8) (LRR K, L))
Depleted	Below Dark Surface	(A11)	Depleted Matrix (F3) Thin Dark Surf					Thin Dark Surface (S9) (LRR K, L)	
Thick Da	rk Surface (A12)		Redox Dark	Surface	e (F6)			Iron-Manganese Masses (F12) (LRR K, L	_, R)
Sandy M	ucky Mineral (S1) leved Matrix (S4)		Depleted Da Redox Depr	ark Surfa essions	ace (⊢7) (E8)			Piedmont Floodplain Solis (F19) (MLRA 1 Mesic Spodic (TA6) (MLRA 144A 145 1	149B) 49B)
Sandy Re	edox (S5)			03310113	(10)			Red Parent Material (F21)	43D)
Stripped	Matrix (S6)							Very Shallow Dark Surface (TF12)	
Dark Sur	face (S7) (LRR R, M	LRA 149B						Other (Explain in Remarks)	
³ Indicators o	f hydrophytic vegeta	tion and we	etland hydrology mu	st be pr	esent, ur	nless dis	sturbed or prob	lematic.	
Restrictive	Layer (if present):								
Type: No	t present							vdric Soil Present? Ves No	x
							n		<u>~</u>
Remarks: No soil co	omments.								

Plot Photo(s) - N :



Plot Photo(s) - E:



Plot Photo(s) - S:



US Army Corps of Engineers 1d7049ce-21ac-4331-84da-dad73a8ac577 W-RDS-17_UPL-1









Project/Site: Flat Creek	City/County: Sprakers, I	Montgomery County	Sampling Date: 2023-5-3
Applicant/Owner: SunEast	State:	NY Sampling Point	: W-RDS-18_PEM-1
Investigator(s): <u>Ryan Snow, Clare Abbatiello</u>		Section, Township, Range	e:
Landform (hillslope, terrace, etc): Depression	Local relief (concave, co	nvex, none): <u>Concave</u>	Slope (%): <u>1 to 3</u>
Subregion (LRR or MLRA):	Lat: <u>42.8515780425</u>	Long: <u>-74.49988088</u>	834 Datum: <u>WGS84</u>
Soil Map Unit Name:		NWI Classificat	ion:
Are climatic / hydrologic conditions on the site typical for this time of	vear? Yes 🗶 No 🔄	(If no, explain in Remark	s.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are	e "Normal Circumstances" pr	esent? Yes 🗶 No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? (If I	needed, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	a sampling point lo	ocations. transects. in	nportant features. etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	Is the Sampled within a Wetlan	Area d? Yes X Vetland Site ID: <u>W-RDS-18</u>	No
Remarks: (Explain alternative procedures here or in a separate repo Covertype is PEM.	ort.)		
HYDROLOGY			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Stained Lea High Water Table (A2) Aquatic Fauna (B: X Saturation (A3) Marl Deposits (B1) Water Marks (B1) Hydrogen Sulfide Sediment Deposits (B2) Oxidized Rhizospi Drift Deposits (B3) Presence of Redu Algal Mat or Crust (B4) Recent Iron Redu Iron Deposits (B5) Thin Muck Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in Integration Integrate) aves (B9) .3) 5) Odor (C1) heres along Living Roots ced Iron (C4) ction in Tilled Soils (C6) e (C7) Remarks)	Secondary Indicato Surface Soil Cra Drainage Patter Moss Trim Lines Dry-Season Wa Crayfish Burrow (C3) X Saturation Visib Stunted or Stres X Geomorphic Po Shallow Aquitar Microtopograph X FAC-Neutral Ter	rs (minimum of two required) acks (B6) rns (B10) s (B16) tter Table (C2) <i>vs</i> (C8) ble on Aerial Imagery (C9) ssed Plants (D1) sition (D2) d (D3) ic Relief (D4) st (D5)
Field Observations:			
Surface Water Present? Yes No X Depth (in	ches):		
Water Table Present? Yes X No Depth (in Saturation Present? Yes X No Depth (in (includes capillary fringe) Yes X No Depth (in	ches): <u>2</u> ches): <u>0</u> Wet	land Hydrology Present?	Yes 🗶 No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections)), if available:	
Remarks: No hydrology comments.			

Sampling Point: <u>W-RDS-18_PEM-1</u>

Tree Stratum (Plot size:30 ft radius) 1. 2. 3. 4.	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 Percent of Dominant Species That Are OBL For the	
6 7.					
	0	= Total	Cover	Prevalence Index worksheet:	
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)				Iotal % Cover of: Multiply by:	
2.				OBL species 30 x 1 = 55	
3.				$FAC \text{ species} \qquad 5 \qquad x 3 = 15$	
4				$\frac{1}{1} = \frac{1}{1} = \frac{1}$	
5.				$\frac{1}{1} = \frac{1}{1} = \frac{1}$	
0 7				Column Totals: 70 (A) 110 (B)	
···	0	= Total	Cover		
Herb Stratum (Plot size: 5 ft radius)				Prevalence Index = $B/A = 1.6$	
1. <u>Typha latifolia</u>	35	Yes	OBL		
2. Phalaris arundinacea	25	Yes	FACW	Hydrophytic Vegetation Indicators:	
3. Impatiens capensis	5	No	FACW		
4. Urtica atolica	5	INO	FAC	▲ 2 - Dominance Test is >50%	
6.				\mathbf{X} 3 - Prevalence Index is ≤3.0 ¹	
7.				4 - Morphological Adaptations ¹ (Provide supportin	g
8				data in Remarks or on a separate sheet)	
9				Problematic Hydrophytic Vegetation ¹ (Explain)	
10				¹ Indicators of hydric soil and wetland hydrology must	:
12.				be present, unless disturbed or problematic.	
	70	= Total	Cover	Definitions of Vagatation Strata	
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				Tree – Woody plants 3 in (7.6 cm) or more in	
1				diameter	
2				at breast height (DBH), regardless of height.	
4.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
	0	= Total	Cover	Herb – All herbaceous (non-woody) plants, regardles	SS
				of size, and woody plants less than 3.28 ft tall.	
				Woody vines – All woody vines greater than 3.28 ft i height.	in
				Hydrophytic Vegetation Present? Yes X No	
Remarks: (Include photo numbers here or on a separate sh	leet.)			<u>.</u>	
No vegetation comments.					

atrix. 30ils ³ : XA 149B) K, L, R) R K, L, R)
atrix. Soils ³ : XA 149B) K, L, R) R K, L, R)
atrix. Soils ³ : ≀A 149B) K, L, R) R K, L, R)
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atrix. Soils ³ : ₹A 149B) K, L, R) R K, L, R)
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atrix. Soils ³ : R 149B) K, L, R) R K, L, R)
atrix. Soils ³ : ₹A 149B) K, L, R) R K, L, R)
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atrix. Soils ³ : RA 149B) K, L, R) R K, L, R)
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· · · ·
२R K, L)
- <i>)</i> .RR K. L. R)
(MLRA 149B)
, 145, 149B)
')
No



Plot Photo(s) - S:



Plot Photo(s) - SE:



US Army Corps of Engineers c80928dd-8a8f-4887-afb6-70fca2f8a4c5 W-RDS-18_PEM-1





Plot Photo(s) - Soil:



US Army Corps of Engineers c80928dd-8a8f-4887-afb6-70fca2f8a4c5 W-RDS-18_PEM-1

Project/Site: Flat Creek	City/County: Sprakers, Montgomery County Sampling Date: 2023-5-3
Applicant/Owner: SunEast	State: NY Sampling Point: W-RDS-18_UPL-1
Investigator(s): Ryan Snow, Clare Abbatiello	Section, Township, Range:
Landform (hillslope, terrace, etc): Flat	Local relief (concave, convex, none): <u>Convex</u> Slope (%): <u>2 to 5</u>
Subregion (LRR or MLRA):	Lat: <u>42.8514465231</u> Long: <u>-74.4999785821</u> Datum: <u>WGS84</u>
Soil Map Unit Name:	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 significant	tly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No 🗴	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes <u>No X</u>
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W-RDS-18
Remarks: (Explain alternative procedures here or in a separate repo Covertype is UPL.	ort.)
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Water-Stained Lex High Water Table (A2) Aquatic Fauna (B2 Saturation (A3) Marl Deposits (B1 Water Marks (B1) Hydrogen Sulfide Sediment Deposits (B2) Oxidized Rhizospi Drift Deposits (B3) Presence of Redu Algal Mat or Crust (B4) Recent Iron Redu Iron Deposits (B5) Thin Muck Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in I Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X	/) Secondary Indicators (minimum of two required) aves (B9) Surface Soil Cracks (B6) 13) Moss Trim Lines (B16) 15) Dry-Season Water Table (C2) Odor (C1) Crayfish Burrows (C8) heres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Jced Iron (C4) Stunted or Stressed Plants (D1) Iction in Tilled Soils (C6) Geomorphic Position (D2) e (C7) Shallow Aquitard (D3) Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) FAC-Neutral Test (D5)
Water Table Present? Yes No X Depth (in Saturation Present? Yes	nches):
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho Remarks: No hydrology comments.	ptos, previous inspections), if available:

Sampling Point: W-RDS-18_UPL-1

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				That Are OBL, FACW, or FAC: 1 (A)
2		·		Total Number of Dominant
4.				Species Across All Strata: <u>2</u> (B)
5.		·		Percent of Dominant Species
6.	_			That Are OBL, FACW, or FAC: 50% (A/B)
7				Prevalence Index worksheet:
	0	= Total	Cover	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft radius)				
2.		·		$\begin{array}{c} OBL species \\ \hline \\ $
3.		·		FACW species $5 \times 2 = 10$
4.	_			FAC species 45 x 3 = 155
5				FACU species $20 \times 4 = 80$
6		·		UPL species $0 \times 5 = 0$
<i>I.</i>				Column Totals: 70 (A) 225 (B)
Herb Stratum (Plot size: 5 ft radius)	0	= 10tal	Cover	
1. Urtica dioica	45	Yes	FAC	Prevalence Index = B/A =
2. Tussilago farfara	20	Yes	FACU	Hydrophytic Vegetation Indicators:
3. Lysimachia nummularia	5	No	FACW	_ 1 - Rapid Test for Hydrophytic Vegetation
4.	_			2 - Dominance Test is >50%
5				_ 3 - Prevalence Index is $\leq 3.0^1$
0 7		·		4 - Morphological Adaptations ¹ (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation ¹ (Explain)
10.				
11				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
12		· <u> </u>		
Woody Vine Stratum (Plot size: 30 ft radius)	/0	= Total	Cover	Definitions of Vegetation Strata:
1.				Tree – Woody plants 3 in. (7.6 cm) or more in
2.				diameter
3.				at breast height (DBH), regardless of height.
4				and greater than or egual to 3.28 ft (1 m) tall.
	0	= Total	Cover	Herb – All berbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
				Hydrophytic
				Vegetation
				Present? Yes No X
Remarks: (Include photo numbers here or on a separate she	et.)			
No vegetation comments.				

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Profile Des	cription: (Describe Matrix	to the dep	th needed to docu Redox	ment th	e indicat es	tor or co	onfirm the a	absence of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 4	10YR 2/1	100	, <i>i</i>				Silt Loan	 1
4 to 18	10YR 4/1	100					Silt Loan	 1
						·		
						· ·		
						·		
1 								2
Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, CS	S=Cover	ed or Co	ated Sar	id Grains.	-Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:				faaa (59		, I	ndicators for Problematic Hydric Soils ³ :
Histic Epi	(A1) ipedon (A2)		MLRA 149E	3)	lace (So		·, <u>-</u>	Coast Prairie Redox (A16) (LRR K, L, MLRA 1496)
Black His	stic (A3)		Thin Dark St	urface (S	69) (LRR	R, MLR	A 149B)	5 cm Muck Peat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		Loamy Muck	ky Miner	al (F1) (L	.RR K, L) _	Dark Surface (S7) (LRR K, L)
Stratified Depleted	Layers (A5) Below Dark Surface	(A11)	Loamy Gleye	ed Matri atrix (E3)	x (⊢2)		-	Thin Dark Surface (S9) (LRR K, L)
Thick Da	rk Surface (A12)	(**==)	Redox Dark	Surface	(F6)		-	Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	ucky Mineral (S1)		Depleted Da	ırk Surfa	ce (F7)		-	Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gi Sandy Re	edox (S5)		Redox Depr	essions	(F8)		-	Red Parent Material (F21)
Stripped	Matrix (S6)						-	Very Shallow Dark Surface (TF12)
Dark Sur	face (S7) (LRR R, MI	_RA 149B))				-	Other (Explain in Remarks)
³ Indicators o	f hydrophytic vegetat	ion and we	etland hydrology mu	st be pre	esent, un	less dist	urbed or pro	oblematic.
Restrictive I	Layer (if present):							
Type: No	t present							
Depth (ind	cnes):							Hydric Soil Present? Yes No _
Remarks:								
Seems to	be fill material but coul	dn't confirm	n.					

Plot Photo(s) - N :



Plot Photo(s) - E:



Plot Photo(s) - S:



US Army Corps of Engineers 76c1e031-85d7-424a-b640-d4864ec7edbd W-RDS-18_UPL-1





Plot Photo(s) - Soil:



US Army Corps of Engineers 76c1e031-85d7-424a-b640-d4864ec7edbd W-RDS-18_UPL-1

Inty: Sprakers, Montgomery County Sampling Date: 2023-11-20
State: NY Sampling Point: W-RDS-19 PEM-1
Section, Township, Range: NA
elief (concave, convex, none): Undulating Slope (%): 1 to 10
2.8581010783 Long: -74.5108310972 Datum: WGS84
NWI Classification: None
s X No (If no, explain in Remarks.)
Ded? Are "Normal Circumstances" present? Yes No 🗴
tic? (If needed, explain any answers in Remarks.)
aling noint locations, transacts, important features, etc.
ming point locations, transects, important leatures, etc.
Is the Sampled Area within a Wetland? Ves X No
If yes, optional Wetland Site ID: W-RDS-19
wetland. Circumstances are not normal due to agricultural activities.
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) Ing Living Roots (C3) (C4) Stunted or Stressed Plants (D1) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
4 Wetland Hydrology Present? Yes No
ious inspections), if available:

Sampling Point: <u>W-RDS-19_PEM-1</u>

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL EACW or EAC: 1 (A)
2				Total Number of Dominant
4.				Species Across All Strata: <u>1</u> (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
Sanling/Shruh Stratum (Plot size: 15 ft radius)	0	= Total	Cover	Total % Cover of: Multiply by:
1.				$\frac{1}{\text{OBL species}} 10 \qquad \text{x1} = 10$
2.				FACW species $85 \times 2 = 170$
3				EAC species $0 \times 3 = 0$
4				FACU species $0 \times 4 = 0$
5				UPL species $0 \times 5 = 0$
7.				Column Totals: 95 (A) 180 (B)
	0	= Total	Cover	
Herb Stratum (Plot size: 5 ft radius)				Prevalence Index = $B/A = 1.9$
1. Phalaris arundinacea		Yes	FACW	Hydronhytic Vegetation Indicators:
2. Juncus effusus	10	INO	OBL	X 1 - Rapid Test for Hydrophytic Vegetation
4.				X 2 - Dominance Test is >50%
5.				X 3 - Prevalence Index is $≤3.0^1$
6 7				- A - Morphological Adaptations ¹ (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation ¹ (Explain)
10				1
11				be present, unless disturbed or problematic.
	95	= Total	Cover	
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				Definitions of Vegetation Strata:
1				diameter
2				at breast height (DBH), regardless of height.
4				Sapling/shrub – Woody plants less than 3 in. DBH
	0	= Total	Cover	and greater than or equal to 3.28 ft (1 m) tall.
				Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in height.
				Hydrophytic Vegetation Present? Yes X No
Remarks: (Include photo numbers here or on a separate s	heet.)			
The criterion for hydrophytic vegetation is met.				

Profile Description: (Describe to the de Matrix		ine uepi	Redox	Feature	es		nfirm the a	bsence of indicators.)
Depth (inches) Colo	or (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 14 10	YR 3/1	95	7.5YR 4/4	5	C	М	Clay	
							5	
·								
·						<u> </u>		
·						·		
·						<u> </u>		
1								
¹ Type: C=Concentrat	ion, D=Deplet	ion, RM=I	Reduced Matrix, CS	S=Cover	ed or Co	ated Sar	d Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicator	rs:						I	ndicators for Problematic Hydric Soils ³ :
Histosol (A1)			Polyvalue Be	elow Sur	face (S8) (LRR F	l, _	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A Black Histic (A2)	42)		MLRA 149E	3) urfaco (S	:0) /I DD		A 1/0P)	_ Coast Prairie Redox (A16) (LRR K, L, R)
Hvdrogen Sulfide	(A4)		Loamy Much	v Miner	al (F1) (L	RR K. L	A 149D))	Dark Surface (S7) (LRR K, L)
Stratified Layers (A5)		Loamy Gley	ed Matri	x (F2)		· -	Polyvalue Below Surface (S8) (LRR K, L)
Depleted Below D	ark Surface (/	A11)	Depleted Ma	atrix (F3)			-	Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surfac	e (A12)		X Redox Dark	Surface	(F6)		-	Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Mucky Min	eral (S1)		Depleted Da	irk Surfa	ce (⊢7) /⊏9)		-	Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Redox (S5)		Redux Depi	62210112	(го)		-	Red Parent Material (F21)
Stripped Matrix (S	, 66)						-	Very Shallow Dark Surface (TF12)
Dark Surface (S7)	(LRR R, MLF	RA 149B)					-	Other (Explain in Remarks)
³ Indicators of hydropl	hytic vegetatic	on and we	tland hydrology mu	st be pre	esent, un	less dist	urbed or pro	blematic.
Restrictive Layer (if	present):							
Type: Not presen	t							
Depth (inches):								Hydric Soil Present? Yes X No
Remarks:								
The criterion for hy	dric soil is met							



Plot Photo(s) - S:



Plot Photo(s) - N:



US Army Corps of Engineers 9cb9f475-f1a9-484a-9a95-9d544afc0f6d W-RDS-19_PEM-1







Drainot/Site: Elat Craalr			Montgom		maling Data: 2022 11
Applicant/Ownor: SunFast	CI	ty/County. <u>Sprakers</u>	$\frac{1}{2}$ NV	Sompling Point: V	וווין Dale. <u>2023-11-</u> או סרא 10 געדו
Applicativowner. <u>SuitEast</u>		Sidio	Soction	Sampling Point	W-KD3-19_0PL-1
Landform (billslope, terrace, etc); Elat		ncal relief (concave, d		a). Undulating	Slope (%): 1 to '
Subrogion (LPB or MLPA):		12 12 12 12 12 12 12 12		$r_{0} = 0100100100100000000000000000000000000$	$\underline{\qquad} \text{Sidpe (90). } \underline{1 \text{ to }}$
Soil Man Unit Name: Burdett channery silt	loam 3 to 8 percent slor	Lat. <u>42,000440000</u>	L0	NWI Classification	<u>)</u> Datum. <u>WOSC</u>
Are climatic / bydrologic conditions on the sit	e typical for this time of ye	ar2 Ves ¥ No	(If no	NWI Classification	
Are Venetation Soil or Hvd	rology significantly	disturbed?	(ii no,	Circumstances" presi	ent? Ves No ¥
Are Vegetation, Soil, or Hyd	rology	hlematic?		vnlain anv answers ir	Remarks)
	h site man al suring				
SUMMARY OF FINDINGS - Attac	n site map snowing	sampling point	locations	s, transects, imp	ortant features, et
Hydrophytic Vegetation Present? Yes	No 🗶	Is the Sample	d Area	Vee	· · · ·
Hydric Soil Present? Yes	No X	within a wetla	ina?		
Wetland Hydrology Present? Yes	No 🗶	If ves. optional	Wetland Sit	te ID: W-RDS-19	
Remarks: (Explain alternative procedures h Covertype is UPL. Based on the absence of	ere or in a separate report. all three parameters, this area) is an upland. Circumst	tances are not	t normal due to agricult	ural activities.
HYDROLOGY					
Wetland Hydrology Indicators:			c	Secondary Indicators	(minimum of two require
Primary Indicators (minimum of one is requ	ired; check all that apply)		<u> </u>	Surface Soil Crack	(<u>Inininiani or two require</u> (s (B6)
Surface Water (A1)	Water-Stained Leave	es (B9)		Drainage Patterns	(B10)
High Water Table (A2)	Aquatic Fauna (B13)		_	Moss Trim Lines (I	B16)
Saturation (A3)	Marl Deposits (B15)	lor(C1)	-	_ Dry-Season Water	(C8)
Sediment Deposits (B2)		res along Living Root		Saturation Visible	on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduce	d Iron (C4)	- (00) <u>-</u>	Stunted or Stresse	ed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	on in Tilled Soils (C6)		Geomorphic Positi	ion (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	-	_ Shallow Aquitard (D3) Daliaf (D4)
Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (I	7) <u> </u>	marks)	_	FAC-Neutral Test ((D5)
				_	
Field Observations:					
Surface Water Present? Yes	No 🗶 Depth (inch	es):			
Water Table Present? Yes	No X Depth (inch	es):	otland Uvdu	rology Brocont? Vo	
(includes capillary fringe)	No <u>A</u> Depth (Inch	es):	ецани пуці	lology Plesent? Te	
Describe Recorded Data (stream gauge, m Remarks: The criterion for wetland hydrology is not r	onitoring well, aerial photos	s, previous inspection	is), if availat	ble:	

Sampling Point: W-RDS-19_UPL-1

Trop Stratum (Plot size: 30 ft radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
1.	³⁰ Cover	Species?	Status	Number of Dominant Species		
2.				That Are OBL, FACW, or FAC: 1 (A)		
3.				Total Number of Dominant		
4				Species Across All Strata: <u>2</u> (B)		
5				Percent of Dominant Species		
6		·		That Are OBL, FACW, or FAC: 50% (A/B)		
<i>I.</i>	0	- Total		Prevalence Index worksheet:		
Sapling/Shrub Stratum (Plot size: 15 ft radius)		- 101ai	Cover	Total % Cover of: Multiply by:		
1.				$\overline{OBL \text{ species } 0} = x 1 = 0$		
2.				EACW species $20 \times 2 = 40$		
3				EAC species $0 \times 3 = 0$		
4				$\frac{1}{1000} = \frac{1}{1000} = 1$		
5				FACE species $\frac{70}{200}$ x 4 = $\frac{200}{200}$		
6				$\frac{1}{2} OPL species \underbrace{0}{2} X S = \underbrace{0}{2} OPL species \underbrace{0}{2} X S S = \underbrace{0}{2} OPL species \underbrace{0}{2} S S S S S S S S S S S S S S S S S S S$		
/				Column Totals: 90 (A) 320 (B)		
Horb Stratum (Plot size: 5 ft radius)	0	= Iotal	Cover			
1 Pog pratensis	60	Ves	FACU	Prevalence Index = $B/A = 3.6$		
Phalaris arundinacea	20	Yes	FACW	Hydrophytic Vegetation Indicators:		
3 Trifolium pratense	5	No	FACU	1 - Rapid Test for Hydrophytic Vegetation		
4 Fragaria virainiana	5	No	FACU	2 - Dominance Test is >50%		
5.						
6.				3 - Prevalence Index is $\leq 3.0^{4}$		
7.				4 - Morphological Adaptations ¹ (Provide supporting		
8				data in Remarks or on a separate sheet)		
9				Problematic Hydrophytic Vegetation ¹ (Explain)		
10				¹ Indicators of bydric soil and wetland bydrology must		
12		·		be present, unless disturbed or problematic.		
12	90	– Total	Covor			
Woody Vine Stratum (Plot size: 30 ft radius)	Cover	Definitions of Vegetation Strata:				
1.				Tree – Woody plants 3 in. (7.6 cm) or more in		
2.				diameter		
3.						
4				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3 28 ft (1 m) tall		
	0	= Total	Cover	Herb — All borbacoous (non woody) plants, regardless		
				of size, and woody plants less than 3.28 ft tall.		
				Woody vines – All woody vines greater than 3 28 ft in		
				height.		
				Hydrophytic		
				Vegetation		
Pemarks: (Include nhoto numbers here or on a senarate sh	oot)					
The criterion for hydrophytic vegetation is not met.						
1						

Profile Des	cription: (Describe t Matrix	o the dep	oth needed to docur Redox	nent th	e indica t es	tor or co	osence of indicators.)				
Depth (inches)	Color (moist)	0⁄~	Color (moist)	0/6			Texture	Remarks			
0 to 12	10VR 5/4	100		-90	туре	LUC	Silt Loam	Remains			
0 10 12	10110.0/4	100					JIII LUAIII				
		·									
				·							
		·									
¹ Type: C=Co	ncentration, D=Deple	etion, RM	=Reduced Matrix, CS	=Cover	ed or Co	ated Sar	nd Grains.	² Location: PL=Pore Lining, M=Mat	rix.		
Hydric Soil I	ndicators:							diastora for Droblematic Hydric Sa			
Histosol (A1)		Polyvalue Be	low Su	rface (S8) (LRR F	ייי ג.	2 cm Muck (A10) (LRR K. L. MLRA	A 149	B)	
Histic Epi	pedon (A2))		/ (,	Coast Prairie Redox (A16) (LRR K	, L, R	() (
Black His	tic (A3)		Thin Dark Su	irface (S	59) (LRR	R, MLR	A 149B)	5 cm Muck Peat or Peat (S3) (LRR	K, L	, R)	
Hydroger	N Sulfide (A4)		Loamy Muck	y Miner	al (F1) (L	.RR K, L	.)	_ Dark Surface (S7) (LRR K, L)		,	
Stratified	Layers (A5) Below Dark Surface	(Δ11)	Loamy Gleye	trix (E3)	X (⊢∠)		—	_ Polyvalue Below Surface (S8) (LRI Thin Dark Surface (S9) (LRB K L)	Polyvalue Below Surface (S8) (LRR K, L)		
Thick Dar	k Surface (A12)	(//11)	Redox Dark	Surface	(F6)		—	Iron-Manganese Masses (E12) (LRR K. L. R)			
Sandy Mi	ucky Mineral (S1)		Depleted Da	rk Surfa	ce (F7)		_	Piedmont Floodplain Soils (F19) (N	ILRÁ	149B)	
Sandy GI	eyed Matrix (S4)		Redox Depre	essions	(F8)			Mesic Spodic (TA6) (MLRA 144A,	145, 3	149B)	
Sandy Re	edox (S5) Motrix (S6)						—	_ Red Parent Material (F21)			
Dark Surf	ace (S7) (LRR R. ML	RA 149B	3					Other (Explain in Remarks)			
	() (<u>-</u> ,		,				_				
³ Indicators o	f hydrophytic vegetati	ion and w	etland hydrology mus	st be pre	esent, un	less dist	urbed or prol	blematic.			
Restrictive I	_ayer (if present):										
Type: <u>No</u>	t present									~	
Depth (inc	nes):						ł	Aydric Soil Present? Yes	NO _	*	
Remarks:											
The criter	ion for hydric soil is no	t met.									



Plot Photo(s) - S:



Plot Photo(s) - W:



US Army Corps of Engineers 2c5b8fb0-8fc8-4cf5-a0bc-268a306bf659 W-RDS-19_UPL-1





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