Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	/	Sampling Date: 202	21-Sept-08
Applicant/Owner: SunEast			State: NY		Sampling Point: W-JM	IP-14_PUB-1
Investigator(s): Jerry Peake, Ca	rson Rowe, Abi Lig	ght	Section, Township,	, Range: NA	Α	
Landform (hillslope, terrace, etc.)): Depression		 Local relief (concave, conv	vex, none):	None	Slope (%): 1 to 3
Subregion (LRR or MLRA):L	.RR L	·	Lat: 42.854913057	73 Long:	-74.5112568359	Datum: WGS84
Soil Map Unit Name: Fonda m	ucky silty clay loar	n, Fo	_		NWI classification	n: None
Are climatic/hydrologic condition	s on the site typica	al for this time of yea	ar? Yes No)(If no	o, explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology ₋	significantly dis	turbed? Are "Norm	al Circumst	tances" present?	Yes No
Are Vegetation, Soil,	or Hydrology ₋	naturally proble	ematic? (If needed,	, explain an	y answers in Remarks.	.)
SUMMARY OF FINDINGS – A	Attach site map	showing samplin	ng point locations, tra	nsects, im	portant features, e	etc.
Hydrophytic Vegetation Present	? Yes _	✓_ No				
Hydric Soil Present?		✓_ No	Is the Sampled Area with	in a Wetlan	d? Yes	No
Wetland Hydrology Present?		No	' If yes, optional Wetland S			мР-14
	· · · · · · · · · · · · · · · · · · ·		•	oite iD.	VV-JI:	VIF-14
Remarks: (Explain alternative pr						
Covertype is PUB. Area is wetlan	d, all three wetlan	d parameters are pr	esent.			
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required; c	heck all that apply)		<u>Secondary</u>	y Indicators (minimum	of two required)
✓ Surface Water (A1)		_ Water-Stained Lea	ves (R9)	Surface	e Soil Cracks (B6)	
✓ High Water Table (A2)		_ Water Stairled Lea ∠ Aquatic Fauna (B1:		Draina	ige Patterns (B10)	
✓ Saturation (A3)		_ Marl Deposits (B15			Trim Lines (B16)	
Water Marks (B1)		_ Hydrogen Sulfide (Dry-Se	ason Water Table (C2)	
Sediment Deposits (B2)	_		eres on Living Roots (C3)	Crayfis	sh Burrows (C8)	
Drift Deposits (B3)	_	_ Oxidized Kilizospii _ Presence of Reduc	_	_✓ Satura	tion Visible on Aerial Ir	magery (C9)
Algal Mat or Crust (B4)	_		tion in Tilled Soils (C6)	Stunte	d or Stressed Plants (D	01)
	_			_✓ Geomo	orphic Position (D2)	
Iron Deposits (B5)		_ Thin Muck Surface		Shallov	w Aquitard (D3)	
✓ Inundation Visible on Aerial I		_ Other (Explain in R	emarks)	Microt	opographic Relief (D4)	
Sparsely Vegetated Concave	Surface (B8)			_✓ FAC-Ne	eutral Test (D5)	
Field Observations:						
Surface Water Present?	Yes 🟒 No _	Depth	(inches): 12	_		
Water Table Present?	Yes _ 🗸 No _	Depth	(inches): 0	Wetland F	Hydrology Present?	Yes No
Saturation Present?	Yes 🟒 No _	Depth	(inches): 0	_		
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge, monitorin	ng well, aerial photos	, previous inspections), if	available:		
Remarks:						
The criterion for wetland hydrol	ogy is met. A posit	ive indication of wet	land hydrology was obser	ved (prima	ry and secondary indic	cators were present).

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test work			
1.	% Cover	Species?	Status	Number of Dominant Are OBL, FACW, or FA	•	1	(A)
2.				Total Number of Don Across All Strata:	ninant Species	1	(B)
3. 4.				Percent of Dominant	•	100	(A/B)
5.				Are OBL, FACW, or FA			 `
6.				Prevalence Index wor		Multiply E	Dv.e-
7.				OBL species	100. 100	x 1 =	<u>2y.</u> 100
	0	= Total Cove	er	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	0	x3=	0
1				FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3				Column Totals	100	(A)	100 (B)
4					Index = B/A =	1	100 (b)
5				-			
6				Hydrophytic Vegetati		logotation	
7				✓ 1- Kapid Test for		regetation	
	0	= Total Cove	er	✓ 3 - Prevalence Ir			
Herb Stratum (Plot size:5 ft)				4 - Morphologic		1 (Provido s	runnorting
1. <i>Lemna minor</i>	100	Yes	OBL	data in Remarks or o			supporting
2				Problematic Hy	-		olain)
3				¹Indicators of hydric			
4				present, unless distu			,,
5				Definitions of Vegeta	tion Strata:		
6.				Tree – Woody plants		r more in d	liameter at
7.				breast height (DBH),	regardless of h	eight.	
8.				Sapling/shrub - Woo	dy plants less t	han 3 in. D	BH and
9.				greater than or equa	l to 3.28 ft (1 m) tall.	
10.				Herb – All herbaceou	-		ardless of
11.				size, and woody plan			
12.				Woody vines – All wo	ody vines grea	ter than 3.	28 ft in
	100	= Total Cove	er	height.			
Woody Vine Stratum (Plot size:30 ft)		_		Hydrophytic Vegetat	ion Present? `	Yes 🟒 N	0
1.							
2.							
3.							
4.							
	0	= Total Cove	er				
Remarks: (Include photo numbers here or on a separa	ate sheet.)			_			
A positive indication of hydrophytic vegetation was ob		0% of domin	ant species	indexed as OBL, FACW,	or FAC). A pos	itive indica	tion of
hydrophytic vegetation was observed (Prevalence Ind							
Hydrophytic Vegetation).		•				•	

Profile Description: (Describe to t Depth Matrix	•	document the i	indicator or confirm the	absence of indicators.)
· -	% Color (moist)	% Type ¹	Loc ² Texture	Remarks
-	<u> </u>	<u>., .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		
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- -				
-	_			
<u> </u>	.		 	
¹Type: C = Concentration, D = De	oletion, RM = Reduced	d Matrix, MS =	Masked Sand Grains.	² Location: PL = Pore Lining, M = Matrix.
Hydric Soil Indicators:	Daharahaa Da	l	:0) (I DD D AN DA 4 40D)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)	Polyvalue Be Thin Dark Su		8) (LRR R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	Loamy Muck			Coast Prairie Redox (A16) (LRR K, L, R)
Hydrogen Sulfide (A4)	Loamy Gleye	•	(5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Stratified Layers (A5)	Depleted Ma	atrix (F3)		Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L)
Depleted Below Dark Surface				Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surface (A12)	Depleted Da			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)	Redox Depre	essions (F8)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4) Sandy Redox (S5)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6)				Red Parent Material (F21)
Dark Surface (S7) (LRR R, MLR	A 149B)			Very Shallow Dark Surface (TF12)
				✓ Other (Explain in Remarks)
3Indicators of hydrophytic vegeta	tion and wetland hyd	rology must b	e present, unless disturl T	bed or problematic.
Restrictive Layer (if observed):	Nama		Livelain Cail Dunnant	Van (Na
Type:	None		Hydric Soil Present?	Yes No
Depth (inches): Remarks:				
	ofile was unobtainable	a Soile are acc	umed to be hydric Soils	s were assumed to be hydric due to the presence of
inundation, FACW and OBL veget			•	were assumed to be flyane add to the presence of
, and a second			,	

Hydrology Photos



Vegetation Photos



Photo of Sample Plot North



Photo of Sample Plot East



Project/Site: Flat Creek Solar Pr	oject		City/County: Spra	kers, Montgomery County	Sampling Date:	2021-Sept-08
Applicant/Owner: SunEast				State: NY	Sampling Point:	W-JMP-14_UPL-1
Investigator(s): Jerry Peake, Ca	arson Rowe, Al	bi Light	t	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.	.): Hillslop	e		Local relief (concave, conv	vex, none): None	Slope (%): 2 to 5
Subregion (LRR or MLRA):	LRR L			Lat: 42.854758539	9 Long: -74.5112576338	Datum: WGS84
Soil Map Unit Name: Fonda n	านcky silty loan	n, Fo			NWI classific	cation: None
Are climatic/hydrologic condition	ns on the site t	ypical	for this time of yea	ar? Yes _✓_ No	(If no, explain in Rema	rks.)
Are Vegetation, Soil,	or Hydrol	ogy	significantly dis	turbed? Are "Norm	al Circumstances" present?	Yes No
Are Vegetation, Soil,	or Hydrol	ogy	naturally proble	ematic? (If needed,	explain any answers in Rem	arks.)
SUMMARY OF FINDINGS – A	Attach site n	nan sl	nowing samplin	ng point locations tra	nsects important featur	es etc
		-		lg point rocations, trai	iscees, important reatar	
Hydrophytic Vegetation Present	î.		No			
Hydric Soil Present?		Yes	No _ _ _	Is the Sampled Area with	n a Wetland?	Yes No/_
Wetland Hydrology Present?		Yes	No	If yes, optional Wetland S	ite ID:	
Remarks: (Explain alternative pi	rocedures here	e or in	a separate report)			
Covertype is UPL. Area is upland	d not all three	wetlar	nd narameters are	nrecent		
Covertype is OPL. Area is upland	a, not all three	wettar	id parameters are	present.		
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I						
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HYDROLOGY						
Watland Hudrology Indicators						
Wetland Hydrology Indicators:						
Primary Indicators (minimum o	f one is require	ed: che	ck all that apply)		Secondary Indicators (minir	num of two required)
<u>-</u>					- ·	
Surface Water (A1)		\	Water-Stained Lea	ves (B9)	Surface Soil Cracks (B6)	
High Water Table (A2)			Aquatic Fauna (B1		Drainage Patterns (B10)	
Saturation (A3)			Marl Deposits (B15		Moss Trim Lines (B16)	
Water Marks (B1)			Hydrogen Sulfide (Dry-Season Water Table	(C2)
Sediment Deposits (B2)				eres on Living Roots (C3)	Crayfish Burrows (C8)	
				•	Saturation Visible on Ae	rial Imagery (C9)
Drift Deposits (B3)			Presence of Reduc		Stunted or Stressed Plan	nts (D1)
Algal Mat or Crust (B4)				tion in Tilled Soils (C6)	Geomorphic Position (D	2)
Iron Deposits (B5)			Thin Muck Surface		Shallow Aquitard (D3)	•
Inundation Visible on Aerial	Imagery (B7)	(Other (Explain in R	temarks)	Microtopographic Relief	: (D4)
Sparsely Vegetated Concave	: Surface (B8)					(D4)
					FAC-Neutral Test (D5)	
Field Observations:	.,					
Surface Water Present?	Yes			inches):	-	
Water Table Present?	Yes	No	<u>/</u> Depth (inches):	Wetland Hydrology Present	? Yes No
Saturation Present?	Yes	No _	<u>/</u> Depth (inches):	_	
(includes capillary fringe)						
Describe Recorded Data (strear	n gauge, moni	toring	well, aerial photos	, previous inspections), if	avaliable:	
Remarks:						
The criterion for wetland hydro	logy is not met	t. No n	ositive indication o	of wetland hydrology was	observed.	
The chicanon for wedana nyaro	-0, .5.10011100	Р				
ĺ						

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test wor Number of Dominan		0	(4)
1. Tsuga canadensis	80	Yes	FACU	Are OBL, FACW, or FA	AC:		(A)
2. <i>Fraxinus americana</i>	20	Yes	FACU	Total Number of Dor	minant Species	7	(B)
3.				Across All Strata:			(5)
4.				Percent of Dominant	•	0	(A/B)
5.				Are OBL, FACW, or FA			
5.				Prevalence Index wo			_
·				Total % Cov		Multiply	-
	100	= Total Cov	er	OBL species	0	x 1 =	0
apling/Shrub Stratum (Plot size:15 i	 ft)	-		FACW species	10	x 2 =	20
. Fraxinus americana	20	Yes	FACU	FAC species	5	x 3 =	15
. Acer saccharum	20	Yes	FACU	FACU species	180	x 4 =	720
. Tsuga canadensis	10	Yes	FACU	UPL species	45	x 5 =	225
				Column Totals	240	(A)	980 (B)
		•		Prevalence	e Index = B/A =	4.1	
·				Hydrophytic Vegetat	ion Indicators:		
				1- Rapid Test fo	r Hydrophytic V	egetation/	า
•		= Total Cov	or	2 - Dominance	Test is > 50%		
lorb Stratum (Blot size) Eft)		_ 10tal COV	CI	3 - Prevalence I	ndex is ≤ 3.0^1		
erb Stratum (Plot size: <u>5 ft</u>) . Eurybia macrophylla	45	Yes	UPL	4 - Morphologic	cal Adaptations	(Provide	supporting
				data in Remarks or o	n a separate sh	ieet)	
. Geranium robertianum		Yes	FACU	Problematic Hy	drophytic Vege	tation¹ (E	xplain)
. Dryopteris carthusiana		No	FACW	¹ Indicators of hydric		-	gy must be
. Fraxinus americana		No No	FACU	present, unless distu		matic	
. Toxicodendron radicans		No	FAC	Definitions of Vegeta			
				Tree – Woody plants			diameter at
•				breast height (DBH),	•	_	
				Sapling/shrub – Woo			DBH and
·				greater than or equa			
0				Herb – All herbaceou		•	gardiess of
1				Woody vines – All wo			29 ft in
2				height.	ody villes great	lei tilali s	.20 11 111
	90	= Total Cov	er		5	, .	
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u>	_)			Hydrophytic Vegeta	tion Present?	res I	No <u>/</u>
				.			
· <u></u>							
· <u></u>							
	0	= Total Cov	er				
Remarks: (Include photo numbers here	or on a senarate sheet)						
lo positive indication of hydrophytic v	•	50% of dom	ninant snecie	es indexed as FAC – or i	drier)		
to positive indication of flydropflytte v	-0	2370 01 0011	aric specie	esaenea as inc oi			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence	of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture	Remarks
0 - 8 10YR 3/4 100 Silt Loam	
8 - 16 10YR 4/3 100 Silt Loam	<u> </u>
	· -
	-
	_
	. .
	<u> </u>
1Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 2Location	: PL = Pore Lining, M = Matrix.
Hydric Soil Indicators: Indica	tors for Problematic Hydric Soils³:
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2	cm Muck (A10) (LRR K, L, MLRA 149B)
Histis Epipodon (A2) Thin Dark Curface (CO) (LDD D MLDA 140D)	past Prairie Redox (A16) (LRR K, L, R)
Plack Histis (A2) Loamy Musley Mineral (F1) (LDD V L)	cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogon Sulfido (A4) Loamy Clayed Matrix (E2)	ark Surface (S7) (LRR K, L)
L Stratitiod Layors (AE) Doploted Matrix (E2)	olyvalue Below Surface (S8) (LRR K, L)
Donloted Roley Dark Surface (A11) Dodoy Dark Surface (E6)	nin Dark Surface (S9) (LRR K, L)
I THICK DARK SUFFACE (ATZ) DEDIETED DARK SUFFACE (EZ)	on-Manganese Masses (F12) (LRR K, L, R)
Sangy Mucky Mineral (ST) Redox Depressions (FX)	edmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleved Matrix (S4)	•
IVI	esic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)	d Davant Matarial (F31)
Christian and Machinic (CC)	ed Parent Material (F21)
Stripped Matrix (S6)Ve	ry Shallow Dark Surface (TF12)
Stripped Matrix (S6)Ve	
Stripped Matrix (S6)Ve	ery Shallow Dark Surface (TF12) Ther (Explain in Remarks)
Stripped Matrix (S6) V6 Dark Surface (S7) (LRR R, MLRA 149B) Of	ery Shallow Dark Surface (TF12) Ther (Explain in Remarks)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or present.	ery Shallow Dark Surface (TF12) Ther (Explain in Remarks)
Stripped Matrix (S6) Ve Dark Surface (S7) (LRR R, MLRA 149B) Oi Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or present to the present of the present	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) New	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.
Stripped Matrix (S6) Vec	ery Shallow Dark Surface (TF12) cher (Explain in Remarks) oblematic.

Vegetation Photos

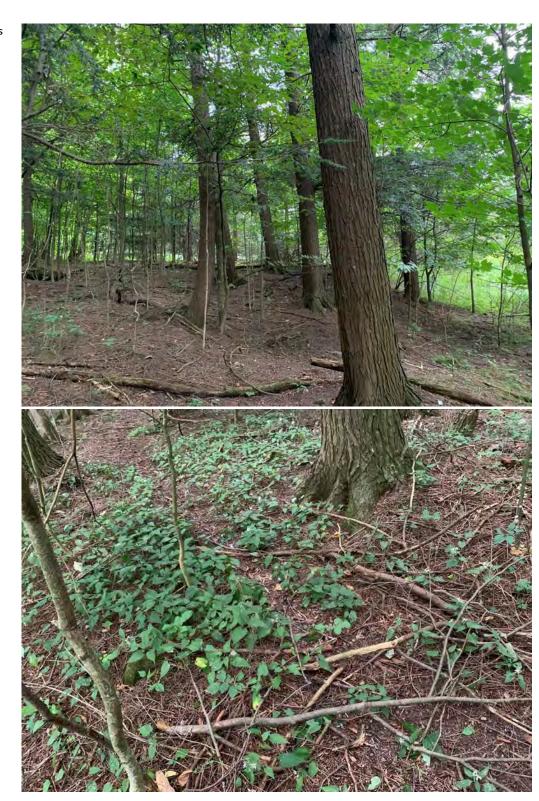




Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	Samp	ling Date: 2021-Sept	t-09
Applicant/Owner: SunEast			State: NY	Samplin	g Point: W-JMP-14_L	JPL-2
Investigator(s): _ Jerry Peake, Ca	rson Rowe, Abi Lig	ht	Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.)	: Terrace		Local relief (concave, conv	ex, none): Convex	Slope	e (%): 1 to 3
Subregion (LRR or MLRA): L	RR L		Lat: 42.854666	Long: -74.510	39 Datur	m: WGS84
Soil Map Unit Name: Fonda m	ucky silty clay loan	n, Fo		NV	VI classification: Nor	ne
Are climatic/hydrologic condition	s on the site typica	al for this time of ye	ar? Yes <u></u> ✓ No	(If no, explain	ı in Remarks.)	
Are Vegetation, Soil,	or Hydrology _	significantly dis	sturbed? Are "Norm	al Circumstances" բ	resent? Yes 🟒	<u> ✓</u> No
Are Vegetation, Soil,	or Hydrology _	naturally probl	ematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – A	Attach site map	showing samplir	ng point locations, trai	nsects, importar	it features, etc.	
Hydrophytic Vegetation Present		✓_ No		•		
			la de a Camanda d'Ama a caidh	: 14/-41 12	V	NI- d
Hydric Soil Present?		No _ _ _	Is the Sampled Area with	iin a wetiand?	Yes	NO <u>/</u>
Wetland Hydrology Present?	Yes _	No	If yes, optional Wetland	Site ID:		
Remarks: (Explain alternative pr	ocedures here or i	n a separate report)			
Covertype is UPL. Area is upland	l, not all three wetl	and parameters are	e present.			
	,					
HYDROLOGY						
Wetland Hydrology Indicators:						
	· · · ·			Carana dana dana di sak		
Primary Indicators (minimum of	one is requirea; c	neck all that apply)		Secondary Indicat	<u>ors (minimum of two</u>	<u>requirea)</u>
Confere Mater (A1)		\\/_+ C+=:===	(DO)	Surface Soil Cr	acks (B6)	
Surface Water (A1)	_	_ Water-Stained Lea		Drainage Patte	rns (B10)	
High Water Table (A2)	_	_ Aquatic Fauna (B1		Moss Trim Line		
Saturation (A3)	_	_ Marl Deposits (B1	5)	Dry-Season Wa		
Water Marks (B1)		_ Hydrogen Sulfide	Odor (C1)	Crayfish Burro		
Sediment Deposits (B2)		_ Oxidized Rhizosph	neres on Living Roots (C3)	•		(60)
Drift Deposits (B3)		Presence of Reduc	ced Iron (C4)		ble on Aerial Imagery	y (C9)
Algal Mat or Crust (B4)		_	tion in Tilled Soils (C6)		essed Plants (D1)	
Iron Deposits (B5)	_	_ Thin Muck Surface		Geomorphic P		
•		_		Shallow Aquita	rd (D3)	
Inundation Visible on Aerial I	•	_ Other (Explain in F	Remarks)	Microtopograp		
Sparsely Vegetated Concave	Surface (B8)			FAC-Neutral Te		
<u> </u>				rac-neutral re	31 (D3)	
Field Observations:						
Surface Water Present?	Yes No _	<u>✓</u> Depth ((inches):	_		
Water Table Present?	Yes No _	<u>✓</u> Depth ((inches):	Wetland Hydrolog	y Present? Yes	SNo _ ∠
Saturation Present?	Yes No _	✓ Depth ((inches):	-		
				-		
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge, monitorin	g well, aerial photos	s, previous inspections), if	available:		
	00.,	0 . ,	., ,			
Remarks:						
	N-		-£	- l u l		
The criterion for wetland hydrol	ogy is not met. No	positive indication (of wetland hydrology was	observea.		

Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply By: OBL species 0
Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply By: OBL species 0
Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply By: OBL species 0 x1 = 0 FACW species 15 x2 = 30 FAC species 83 x3 = 249 FACU species 75 x4 = 300 UPL species 0 x5 = 0 Column Totals 173 (A) 579 (B) Prevalence Index = B/A = 3.3 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤ 3.0¹ 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
Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply By: OBL species 0 x1 = 0 FACW species 15 x2 = 30 FAC species 83 x3 = 249 FACU species 75 x4 = 300 UPL species 0 x5 = 0 Column Totals 173 (A) 579 (B) Prevalence Index = B/A = 3.3 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤ 3.01 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
Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply By: OBL species 0
Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: OBL species 0
Prevalence Index worksheet: Total % Cover of: Multiply By: OBL species 0
Total % Cover of: Multiply By:
OBL species FACW species FAC species FAC species FACU
FACW species 15 x 2 = 30 FAC species 83 x 3 = 249 FACU species 75 x 4 = 300 UPL species 0 x 5 = 0 Column Totals 173 (A) 579 (B) Prevalence Index = B/A = 3.3 Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤ 3.01 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
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FACU species 75 x 4 = 300 UPL species 0 x 5 = 0 Column Totals 173 (A) 579 (B) Prevalence Index = B/A = 3.3 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is \leq 3.01 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
UPL species 0 x 5 = 0 Column Totals 173 (A) 579 (B) Prevalence Index = B/A = 3.3 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤ 3.0¹ 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
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data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be
¹Indicators of hydric soil and wetland hydrology must be
, , ,
present, unless disturbed or problematic
Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at
breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH and
greater than or equal to 3.28 ft (1 m) tall.
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
_
_
_
_

		to the de				indicato	r or confirm the a	absence of indicators.)
Depth	Matrix		Redox	Feat	tures			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	
0 - 12	10YR 4/4	100		_			Silt Loam	n
12 - 18	10YR 5/4	100		_			Silt Loam	m
-								
-								
	-			_				
	-			_				
	· -			_			-	·
	-			_				
	-			_			•	
	-			_				
				_				
				_				
¹Type: C =	Concentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	Location: PL = Pore Lining, M = Matrix.
Hydric Soil	I Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	ol (A1)		Polyvalue Bel	ow S	Surface (S	88) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	Epipedon (A2)		Thin Dark Sur	face	(S9) (LRF	R R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
	Histic (A3)		Loamy Mucky			(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
,	gen Sulfide (A4)		Loamy Gleyed					Dark Surface (S7) (LRR K, L)
	ed Layers (A5)		Depleted Mat					Polyvalue Below Surface (S8) (LRR K, L)
	ed Below Dark Surf	ace (A11						Thin Dark Surface (S9) (LRR K, L)
	Dark Surface (A12)		Depleted Dar)		Iron-Manganese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy	Redox (S5)							Red Parent Material (F21)
Strippe	ed Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark S	urface (S7) (LRR R, N	/ILRA 149	9B)					Other (Explain in Remarks)
3Indicators	s of hydrophytic veg	retation a	and wetland hydr	olog	v must h	e preser	nt. unless disturbe	•
-	Layer (if observed):		and Wedana nyan	0.08	y mast b	l preser	it, ariiess aistarbe	ed of problematic.
Restrictive	Type:	•	None			Hydric	: Soil Present?	Yes No _ _ ⁄_
			None			liyund	. Johr Fresent:	165 NO <u></u>
	Depth (inches):					l .		
Remarks: No positive	e indication of hydr	ic soils w	vas observed. The	crit€	erion for	hydric s	oil is not met.	

Vegetation Photos







Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	ject	City/County: Spra	kers, Montgomery County	Sampling Da	te: 2021-Sept-09
Applicant/Owner: SunEast			State: NY	Sampling Point	:_ W-JMP-14_UPL-3
Investigator(s): _ Jerry Peake, Ca	rson Rowe, Abi Lig	ght	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.)	: Hillslope		Local relief (concave, conv	rex, none): Convex	Slope (%): 2 to 5
Subregion (LRR or MLRA): L	RR L		Lat: 42.854393	Long: -74.509286	Datum: WGS84
Soil Map Unit Name: Nunda ch	nannery silt loam,	NuD		NWI class	ification: None
Are climatic/hydrologic condition	s on the site typica	al for this time of yea	ar? Yes <u></u> ✓ No	(If no, explain in Rer	narks.)
Are Vegetation, Soil,	or Hydrology ₋	significantly dis	sturbed? Are "Norm	al Circumstances" present	? Yes 🟒 No
Are Vegetation, Soil,	or Hydrology ₋	naturally probl	ematic? (If needed,	explain any answers in Re	emarks.)
SUMMARY OF FINDINGS – A	ttach site map	showing sampling	ng point locations, trai	nsects, important feat	ures, etc.
Hydrophytic Vegetation Present				•	
		No	leaber Consulted Assessment	: W	V N- (
Hydric Soil Present?		No / _	Is the Sampled Area with	in a wetiand?	Yes No/
Wetland Hydrology Present?	Yes _	No	If yes, optional Wetland	Site ID:	
Remarks: (Explain alternative pro Covertype is UPL. Area is upland					
Covertype is OPL. Area is upland	, not all three wet	iano parameters are	e present.		
I					
11/0001001					
HYDROLOGY					
Wetland Hydrology Indicators:					
Primary Indicators (minimum of	one is required; c	heck all that apply)		Secondary Indicators (mi	nimum of two required)
	·		(20)	Surface Soil Cracks (B	•
Surface Water (A1)	_	_ Water-Stained Lea		Drainage Patterns (B1	•
High Water Table (A2)	_	_ Aquatic Fauna (B1		Moss Trim Lines (B16))
Saturation (A3) Water Marks (B1)		_ Marl Deposits (B15		Dry-Season Water Tal	ole (C2)
	_	_ Hydrogen Sulfide (Crayfish Burrows (C8)	1
Sediment Deposits (B2)	_	_ Oxidized Knizosph _ Presence of Reduc	neres on Living Roots (C3)	Saturation Visible on	Aerial Imagery (C9)
Drift Deposits (B3)	_			Stunted or Stressed P	lants (D1)
Algal Mat or Crust (B4)	_	_ Recent fron Reduc _ Thin Muck Surface	tion in Tilled Soils (C6)	Geomorphic Position	(D2)
Iron Deposits (B5) Inundation Visible on Aerial I	— magan/(P7)	_ Other (Explain in F		Shallow Aquitard (D3)	
Sparsely Vegetated Concave	-	_ Other (Explain in F	Remarks)	Microtopographic Rel	ief (D4)
sparsely vegetated Collcave	Surface (Bo)			FAC-Neutral Test (D5)	
Field Observations:					
Surface Water Present?	Yes No _	<u>✓</u> Depth ((inches):		
Water Table Present?	Yes No _	<u>✓</u> Depth ((inches):	Wetland Hydrology Prese	ent? Yes No
Saturation Present?	Yes No _	<u>✓</u> Depth ((inches):		
(includes capillary fringe)				-	
Describe Recorded Data (stream	gauge monitorin	a well periol photos	nravious inspactions) if	available:	
Describe Recorded Data (stream	i gauge, monitorii	ig weil, aeriai priotos	s, previous irispections), ir	available.	
Remarks:					
The criterion for wetland hydrol	ogy is not met. No	positive indication of	of wetland hydrology was	observed.	

Tree Stratum (Plot size: 30 ft)		Dominant		Dominance Test worksheet:
		Species?	Status	Number of Dominant Species That 4 (A)
1. <u>Carya cordiformis</u>	60	Yes	FAC	Are OBL, FACW, or FAC:
2. Acer saccharum	20	Yes	FACU	Total Number of Dominant Species Across All Strata: 6 (B)
3. Tsuga canadensis	10	No	FACU	Percent of Dominant Species That
4. <i>Carya ovata</i>	5	No	FACU	Are OBL, FACW, or FAC: 66.7 (A/B
5. <i>Ulmus americana</i>	5	No	FACW	Prevalence Index worksheet:
5.				Total % Cover of: Multiply By:
7				OBL species $0 \times 1 = 0$
	100	_= Total Cov	er	FACW species 5 x 2 = 10
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species 90 x 3 = 270
1. Acer saccharum	30	Yes	FACU	FACU species 70 x 4 = 280
2. Tsuga canadensis	5	No	FACU	UPL species 0 x 5 = 0
3				Column Totals 165 (A) 560 (E
4				Prevalence Index = B/A =3.4
5				
5.				Hydrophytic Vegetation Indicators:
7				1- Rapid Test for Hydrophytic Vegetation
	35	= Total Cov	er	✓ 2 - Dominance Test is >50%
Herb Stratum (Plot size: <u>5 ft</u>)		=		3 - Prevalence Index is ≤ 3.01
1. <i>Carya cordiformis</i>	15	Yes	FAC	4 - Morphological Adaptations¹ (Provide supportine data in Remarks or on a separate sheet)
2. Dryopteris intermedia	5	Yes	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
3.				¹Indicators of hydric soil and wetland hydrology must b
4.				present, unless disturbed or problematic
5.				Definitions of Vegetation Strata:
5.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7.				breast height (DBH), regardless of height.
8.				Sapling/shrub – Woody plants less than 3 in. DBH and
9.				greater than or equal to 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	20	= Total Cov	or	height.
Woody Vine Stratum (Plot size:30 ft)			Ci	Hydrophytic Vegetation Present? Yes ✓ No
1. Vitis riparia	10	Yes	FAC	
2.		163	TAC	
3				
4		Tatal Car		
	10	_= Total Cov	rer	

	cription: (Describe	to the de	•			indicato	r or confirm the ab	osence of indica	tors.)
Depth _	Matrix		Redox			12	Taratrana		Damandra
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks
0 - 6	10YR 3/3	100		_			Silt Loam		
6 - 12	10YR 3/3	100	10YR 4/6	_			Silt Loam		
12 - 18	10YR 4/3	95	10YR 4/6	5	C	M	Silt Loam		
				_					
				_					
				_					
		. —		_					
				_					
¹Type: C = C	Concentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Por	re Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for I	Problematic Hydric Soils³:
Histosol	(A1)		Polyvalue Be	low S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark Su						rie Redox (A16) (LRR K, L, R)
Black Hi			Loamy Muck			(LRR K, I	_)		y Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surfa	ce (S7) (LRR K, L)
	d Layers (A5) d Below Dark Surfa		Depleted Ma					Polyvalue E	Below Surface (S8) (LRR K, L)
	d Below Dark Surfa ark Surface (A12)	ace (ATT)	Depleted Dark			١		Thin Dark S	Surface (S9) (LRR K, L)
	fucky Mineral (S1)		Redox Depre			,		Iron-Manga	anese Masses (F12) (LRR K, L, R)
_	Gleyed Matrix (S4)		Redox Depre	33101	13 (10)			Piedmont F	Floodplain Soils (F19) (MLRA 149B)
	ledox (S5)							Mesic Spoo	dic (TA6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)								t Material (F21)
	rface (S7) (LRR R, N	AI DA 1/10	DD)						ow Dark Surface (TF12)
Daik 3u	11ace (37) (LKK K, K	ALIXA 143	, , , , , , , , , , , , , , , , , , ,					Other (Exp	lain in Remarks)
³ Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must b	e preser	it, unless disturbed	d or problemation	с.
Restrictive I	_ayer (if observed):	:							
	Type:		None			Hydric	Soil Present?	Yes _	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







Photo of Sample Plot North



Photo of Sample Plot East



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery Count	.y	Sampling Date: 2021-Sept-09			
Applicant/Owner: SunEast		<u> </u>	State: N	/	Sampling Point: W-JM	1P-15_PUB-1		
Investigator(s): Jerry Peake, Ca	rson Rowe, Abi Lig	ght	Section, Township					
Landform (hillslope, terrace, etc.)): Hilltop		Local relief (concave, cor	vex, none):	Concave	Slope (%): 0 to 1		
Subregion (LRR or MLRA):L	.RR L	_	Lat: 42.853052	Long:	-74.506119	Datum: WGS84		
Soil Map Unit Name: Burdett	channery silt loam	, BuC			NWI classificatio	n: PUS		
Are climatic/hydrologic condition	s on the site typic	al for this time of ye	ar? Yes <u>✓</u> N	o (If no	o, explain in Remarks.)			
Are Vegetation, Soil,	or Hydrology ₋	significantly dis	sturbed? Are "Norr	nal Circumst	tances" present?	Yes No		
Are Vegetation, Soil,	or Hydrology ₋	naturally probl	ematic? (If needed	l, explain an	y answers in Remarks	.)		
SUMMARY OF FINDINGS – A	Attach site map	showing samplir	ng point locations, tra	nsects, im	portant features,	etc.		
Hydrophytic Vegetation Present	? Yes ِ	✓_ No						
Hydric Soil Present?	Yes _	✓_ No	Is the Sampled Area with	nin a Wetlan	d? Yes	No		
Wetland Hydrology Present?	Yes _	No	If yes, optional Wetland	Site ID:	W-JI	MP-15		
Remarks: (Explain alternative pr		<u> </u>						
Covertype is PUB. Area is wetlan								
Covertype is POB. Area is wellan	a, all three wetian	d parameters are pi	resent.					
HYDROLOGY								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of	one is required; c	heck all that apply)		-	y Indicators (minimum	of two required)		
∕_ Surface Water (A1)		_ Water-Stained Lea	aves (B9)		ace Soil Cracks (B6)			
High Water Table (A2)		_ Aquatic Fauna (B1			inage Patterns (B10)			
✓ Saturation (A3)		_ Marl Deposits (B1			ss Trim Lines (B16)			
Water Marks (B1)		_ Hydrogen Sulfide			y-Season Water Table (C2)			
Sediment Deposits (B2)	_		neres on Living Roots (C3)		sh Burrows (C8)			
Drift Deposits (B3)	_	_ Presence of Reduc	_	(C4) Saturation visible on Aeriai imagery (C9)				
Algal Mat or Crust (B4)	_		tion in Tilled Soils (C6)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	_	_ Thin Muck Surface		✓ Geomorphic Position (D2)				
Inundation Visible on Aerial I	magery (R7)	_ Other (Explain in F		Shallow Aquitard (D3)				
Sparsely Vegetated Concave	•	_ Other (Explain in r	Nemarks)	Microt	opographic Relief (D4)	1		
Sparsely vegetated Collcave	Surface (Bo)			∕ FAC-N	eutral Test (D5)			
Field Observations:								
Surface Water Present?	Yes No	Depth	(inches): 15	_				
Water Table Present?	Yes No	Depth	(inches): 0	Wetland F	Hydrology Present?	Yes No		
Saturation Present?	Yes 🟒 No _	Depth	(inches): 0	_				
(includes capillary fringe)								
Describe Recorded Data (stream	າ gauge, monitorir	g well, aerial photos	s, previous inspections), if	available:				
Remarks:								
The criterion for wetland hydrol	ogy is met. A posit	ive indication of wet	tland hydrology was obse	rved (prima	ry and secondary indi	cators were present).		

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test wor			
1.	% Cover	Species?	Status	Number of Dominar Are OBL, FACW, or FA	•	1	(A)
2.				Total Number of Dor Across All Strata:	minant Species	1	(B)
3 4.				Percent of Dominant	•	100	(A/B)
5.				Are OBL, FACW, or FA			_
6				Total % Cov		Multiply B	\ <i>r</i>
7				- OBL species	10	x 1 =	y. 10
	0	= Total Cove	er	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	0	x3=	0
1				- FACU species	0	x 4 =	0
2				- UPL species		x 5 =	0
3.				- Column Totals	10		
4.						(A)	10 (B)
5.				-		1	
6.				Hydrophytic Vegetat			
7.				1- Rapid Test fo		egetation	
		= Total Cove	er	2 - Dominance			
Herb Stratum (Plot size:5 ft)		-		3 - Prevalence I			
1. <i>Typha latifolia</i>	10	Yes	OBL	4 - Morphologic			upporting
2.				data in Remarks or c			
3.					drophytic Vege		
4.				¹Indicators of hydric		, 0.	y must be
5.				present, unless distu		nauc	
6.				Definitions of Vegeta			
o. 7.				Tree – Woody plants breast height (DBH),			ameter at
-				Sapling/shrub – Woo	•	_	DL and
8				greater than or equa			on allu
9.				Herb – All herbaceou			ardlass of
10				size, and woody plar			ai diess oi
11				Woody vines – All wo			8 ft in
12				height.	body villes great		.0 10 111
	10	= Total Cove	er	Hydrophytic Vegeta	tion Procent? \	/os / No	
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic vegeta	don Fresent:	les _ / _ IVC	,
1				=			
1				-			
Z				_			
2							
-				<u>-</u>			

Profile Desc Depth	ription: (Describe to	the o	lepth needed to			indicato	or confirm the a	absence of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
-		_			<u> </u>			
		_		_				
				_				
		_					-	
		_						
		_		_				
		_						
-		_		_				
		_		_				
		_						
1Type: C = C	 oncentration, D = D	enleti	on RM = Reduce	- Ma	trix MS =	: Masked	Sand Grains 21	Location: PL = Pore Lining, M = Matrix.
Hydric Soil		chici	on, Nivi - Neudle	u ivid	u 17, 1913 -	iviaskeu	Juliu Grailis. "I	Indicators for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be	low !	Surface (58) (LRR I	R, MLRA 149B)	·
	oipedon (A2)		Thin Dark Su					2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Mucl	y Mi	neral (F1)	(LRR K, I	-)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gley					Dark Surface (S7) (LRR K, L)
	d Layers (A5)	- (11	Depleted Ma					Polyvalue Below Surface (S8) (LRR K, L)
	d Below Dark Surfac ark Surface (A12)	.е (А і	Depleted Da			')		Thin Dark Surface (S9) (LRR K, L)
	lucky Mineral (S1)		Redox Depr			,		Iron-Manganese Masses (F12) (LRR K, L, R)
_	ileyed Matrix (S4)				- (- /			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	edox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped	l Matrix (S6)							Red Parent Material (F21) Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M l	RA 14	19B)					very shallow bank surface (1112) Other (Explain in Remarks)
³ Indicators	of hydrophytic vege	tation	and wetland hyd	rolog	gy must b	e preser	t, unless disturb	
Restrictive I	ayer (if observed):							
	Type:		None			Hydric	Soil Present?	Yes No
	Depth (inches):							
Remarks:								
							-	were assumed to be hydric due to the presence of
inundation,	FACW and OBL veg	etatio	n species, and a o	defini	tive wetl	and bour	ndary.	

Hydrology Photos



Vegetation Photos



Photo of Sample Plot East



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pr	oject		City/County: Spra	kers, Montgomery County	У	Sampling Date: 2021-Sept-09			
Applicant/Owner: SunEast	cant/Owner: SunEast			State: NY	S	Sampling Point: W-JMP-15_UPL-1			
Investigator(s): Jerry Peake, C	arson Rowe, Al	bi Light		Section, Township	, Range: NA				
Landform (hillslope, terrace, etc	:.): Hilltop			Local relief (concave, con	vex, none):	Convex	Slope (%): 2 to 5		
Subregion (LRR or MLRA):	LRR L			Lat: 42.852975	Long: -	-74.506291	Datum: WGS84		
Soil Map Unit Name: Burdett	channery silt le	oam, B	uC			NWI classification	n: None		
Are climatic/hydrologic condition	ns on the site t	ypical f	or this time of year	ar? Yes _✓_ No	o (If no,	explain in Remarks.)			
Are Vegetation, Soil,	or Hydrol	ogy	significantly dis				Yes No _ _ /_		
Are Vegetation, Soil,			naturally probl		, explain any	answers in Remarks.)		
_	-								
SUMMARY OF FINDINGS –	Attach site n	nap sh	nowing samplir	ng point locations, tra	nsects, imp	portant features, e	etc.		
Hydrophytic Vegetation Presen	t?	Yes	No / _						
Hydric Soil Present?		Yes	No _ _ /_	Is the Sampled Area with	in a Wetland	? Yes	No <u></u> /_		
Wetland Hydrology Present?		Yes	No _ _	If yes, optional Wetland S	Site ID:				
Remarks: (Explain alternative p									
HYDROLOGY Wetland Hydrology Indicators:									
Primary Indicators (minimum o	of one is require	ed: che	ck all that apply)		Secondary	Indicators (minimum	of two required)		
1 maicacors (minimum o	1 One is require	cu, ciic	ck an that apply;		-	Soil Cracks (B6)	or two required;		
Surface Water (A1)			Water-Stained Lea		Drainage Patterns (B10)				
High Water Table (A2)			Aquatic Fauna (B1		_	rim Lines (B16)			
Saturation (A3)			Marl Deposits (B1		Dry-Sea	ason Water Table (C2)			
Water Marks (B1) Sediment Deposits (B2)			Hydrogen Sulfide	neres on Living Roots (C3)	Cravfish Burrows (C8)				
Sediment Deposits (B2) Drift Deposits (B3)			Presence of Reduc	_	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)				tion in Tilled Soils (C6)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)			Thin Muck Surface		Geomorphic Position (D2)				
Inundation Visible on Aerial	Imagery (B7)		Other (Explain in F		Shallow Aquitard (D3)				
Sparsely Vegetated Concave					Microtopographic Relief (D4)				
Field Observations:					FAC-Ne	utral Test (D5)			
Surface Water Present?	Yes	No	<u>′</u> Depth (inches):					
Water Table Present?	Yes			inches):	- Wetland Hy	ydrology Present?	Yes No 		
Saturation Present?	Yes			inches):	_				
(includes capillary fringe)					-				
Describe Recorded Data (stream	m galige moni	toring v	well aerial nhotos	nrevious inspections) if	available:				
			ren, dendi priotos	, ргеново изрескопод п	avanabie.				
Remarks:									
The criterion for wetland hydro	logy is not met	t. No po	ositive indication o	of wetland hydrology was	observed.				

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant		•	40
1.				Are OBL, FACW, or FAC		0	(A)
2.	· ——			Total Number of Domi			
3.				Across All Strata:	·	2	(B)
·				Percent of Dominant S	pecies That		(A (D)
4				Are OBL, FACW, or FAC	:	0	(A/B)
5				Prevalence Index work	sheet:		
6.				Total % Cover	of:	Multiply	By:
7				OBL species	0	x 1 =	0
	0	= Total Cove	er	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	10	x 3 =	30
1				FACU species	125	x 4 =	500
2				UPL species	50	x 5 =	250
3				Column Totals	185	•	780 (B)
4.	-			-		(A)	76U (b)
5.				Prevalence II		4.2	
6.				Hydrophytic Vegetation			
7.	-			1- Rapid Test for		egetation/	ו
· ·	0	= Total Cove	er er	2 - Dominance Te			
Herb Stratum (Plot size: _ 5 ft)		-	-1	3 - Prevalence Inc	dex is $\leq 3.0^{1}$		
1. Trifolium pratense	60	Yes	FACU	4 - Morphologica			supporting
	40			data in Remarks or on	•		
2. Dactylis glomerata	- — —	Yes	FACU	Problematic Hydi	, , ,	-	
3. Daucus carota	30	No	UPL	¹ Indicators of hydric so	il and wetlan	d hydrolc	gy must be
4. Thaspium barbinode	20	No	UPL	present, unless disturb	ed or probler	matic	
5. Lotus tenuis	15	No	FACU	Definitions of Vegetation	on Strata:		
6. <i>Setaria pumila</i>	10	No	FAC	Tree – Woody plants 3	in. (7.6 cm) or	more in	diameter at
7. Galium mollugo	10	No	FACU	breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub - Woody			DBH and
9				greater than or equal t			
10				Herb – All herbaceous			gardless of
11.	-			size, and woody plants			
12.				Woody vines – All woo	dy vines great	ter than 3	.28 ft in
	185	= Total Cove	er	height.			
Woody Vine Stratum (Plot size:30 ft)		-		Hydrophytic Vegetation	n Present? \	/es I	Vo <u> </u>
1.							
2							
3.							
4.							
4.		Tatal Carr					
	0	= Total Cove	er				
Remarks: (Include photo numbers here or on a separate	te sheet.)						
Pond embankment.							

	•	to the de	•			ndicator	or confirm the a	bsence of indicator	s.)		
Depth _	Matrix		Redox			12	Tand			-	Na ma a milea
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Text			H	Remarks
0 - 15	10YR 3/2	100		-			Silty Cla	ly Loam			
		· —		. —							
											_
				_							
				_							
				-				-			
				-							
				-							
¹Type: C = C	oncentration, D = I	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore L	ining,	M = Mat	rix.
Hydric Soil I	ndicators:							Indicators for Pro	blema	tic Hydri	ic Soils³:
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	8) (LRR F	R, MLRA 149B)	2 cm Muck (A	10) (LR	R K. L. IV	ILRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Sui	rface	(S9) (LRR	R, MLR	A 149B)	Coast Prairie I			
Black Hi	stic (A3)		Loamy Mucky	/ Mir	eral (F1)	(LRR K, L	_)	5 cm Mucky P			
Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface			, (= , =,,
Stratifie	d Layers (A5)		Depleted Ma	trix (I	- 3)			Polyvalue Belo			(IRRKI)
Deplete	d Below Dark Surfa	ace (A11)	Redox Dark S	urfa	ce (F6)			Thin Dark Sur			
	ark Surface (A12)		Depleted Dar					Iron-Mangane			
Sandy M	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			Piedmont Floo		•	
Sandy G	ileyed Matrix (S4)										
Sandy R	edox (S5)							Mesic Spodic			14A, 143, 149D)
Stripped	d Matrix (S6)							Red Parent M			FF1.2\
	rface (S7) (LRR R, M	1LRA 149)B)					Very Shallow I			IF12)
	,		•					Other (Explair	ı ın kei	marks)	
3Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must be	e presen	t, unless disturbe	ed or problematic.			
Restrictive I	_ayer (if observed):										
	Type:		None			Hydric	Soil Present?	•	es	_ No _,	_
	Depth (inches):			-							
Remarks:	<u> </u>					-I					
No positive	indication of hydri	c soils w	as observed. The	e crité	erion for l	hydric sc	oil is not met.				

Vegetation Photos

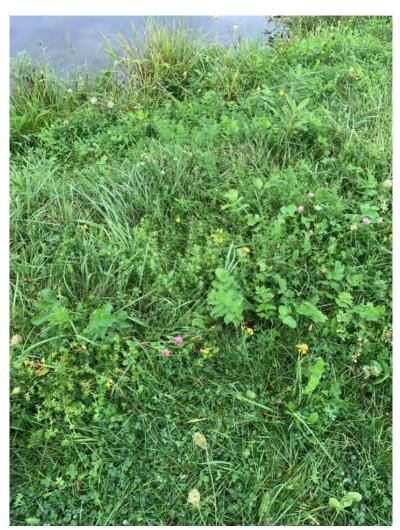


Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject		City/County: Spra	r: Sprakers, Montgomery County Sampling Date: 2021-Sept-09					
Applicant/Owner: SunEast				State: NY		Sampling Point: W-JMP-16_PEM-1			
Investigator(s): Jerry Peake, Ca	rson Rowe, Al	bi Lig	ht	Section, Township,					
Landform (hillslope, terrace, etc.)): Terrace	<u>:</u>		Local relief (concave, conv	Concave	Slope (%): 1 to 3			
Subregion (LRR or MLRA):L	.RR L			Lat: 42.851724	Long:	-74.50285	Datum: WGS84		
Soil Map Unit Name: Ilion silt	loam, IIA					NWI classificat	ion: None		
Are climatic/hydrologic condition	s on the site t	ypica	l for this time of ye	ar? Yes <u>√</u> No	(If no	, explain in Remarks	i.)		
Are Vegetation, Soil,	or Hydrol	ogy _	significantly dis	sturbed? Are "Norm	al Circumst	tances" present?	Yes <u></u> No		
Are Vegetation, Soil,	or Hydrol	ogy_	naturally probl	ematic? (If needed,	explain an	y answers in Remark	(s.)		
SUMMARY OF FINDINGS – A	Attach site n	nap :	showing samplir	ng point locations, tran	nsects, im	portant features	, etc.		
Hydrophytic Vegetation Present	?	Yes _	✓_ No						
Hydric Soil Present?	,	Yes _	✓_ No	Is the Sampled Area withi	n a Wetlan	d? Ye	s No		
Wetland Hydrology Present?	,	Yes _	∠_ No	If yes, optional Wetland S	ite ID:	W	-JMP-16		
Remarks: (Explain alternative pr			<u> </u>			<u>,```</u>	J		
Covertype is PEM. Area is wetlar	nd, all three we	etlan	d parameters are p	resent.					
LIVEROLOGY									
HYDROLOGY									
Wetland Hydrology Indicators:									
Primary Indicators (minimum of	one is require	ed: ch	neck all that apply)		Secondary	y Indicators (minimu	m of two required)		
- Timery marcators (Timerinania	one is require	cu, ci	reek all triat apply)		-	e Soil Cracks (B6)	m or two required,		
Surface Water (A1)			_ Water-Stained Lea			ige Patterns (B10)			
High Water Table (A2)			_ Aquatic Fauna (B1			rim Lines (B16)			
Saturation (A3)			_ Marl Deposits (B1			Season Water Table (C2)			
Water Marks (B1)			_ Hydrogen Sulfide		-	sh Burrows (C8)			
Sediment Deposits (B2)			•	neres on Living Roots (C3)	Roots (C3) Saturation Visible on Aerial Imagery (C9				
Drift Deposits (B3)			Presence of Reduce		Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)			="	tion in Tilled Soils (C6)	✓ Geomorphic Position (D2)				
Iron Deposits (B5)			_ Thin Muck Surface		Shallow Aquitard (D3)				
Inundation Visible on Aerial	lmagery (B7)		_ Other (Explain in F	Remarks)	Microtopographic Relief (D4)				
Sparsely Vegetated Concave	Surface (B8)				✓ FAC-Neutral Test (D5)				
Field Observations:					I AC-IN	edital lest (D3)			
Surface Water Present?	Yes	No _	<u>✓</u> Depth ((inches):					
Water Table Present?	Yes	No	✓ Depth ((inches):	- Wetland F	Hydrology Present?	Yes No		
Saturation Present?	Yes			(inches):	-	, · · · · · · · · · · · · · · · · · · ·			
(includes capillary fringe)	.05		<u>•</u>		-				
									
Describe Recorded Data (strean	n gauge, moni	toring	g weii, aeriai photos	s, previous inspections), if a	avallable:				
Remarks:									
The criterion for wetland hydrol	ogvis mot Ar	aociti	vo indication of wo	tand bydrology was obsor	vod (at load	t two socondany ind	icators)		
The criterion for wetland hydroi	ogy is met. A p	JOSILI	ve muication of wei	liand nydrology was obser	veu (at leas	st two secondary ind	icators).		

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species Th	at 3	(4)
1. <i>Tilia americana</i>	20	Yes	FACU	Are OBL, FACW, or FAC:		(A)
2. Populus tremuloides	10	Yes	FACU	Total Number of Dominant Speci	es 5	(B)
3.				Across All Strata:		
4.				Percent of Dominant Species That Are OBL, FACW, or FAC:	it 60	(A/B)
5.				Prevalence Index worksheet:		
6.				<u>Total % Cover of:</u>	<u>Multiply</u>	<u>/ By:</u>
7				OBL species 0	x 1 =	0
	30	= Total Cov	er	FACW species 135	x 2 =	270
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species 0	x 3 =	0
1. <u>Salix alba</u>	15	Yes	FACW	FACU species 30	x 4 =	120
2				UPL species 0	x 5 =	0
3				Column Totals 165	(A)	390 (B)
4				Prevalence Index = B/A	= 2.4	
5				Hydrophytic Vegetation Indicator	.c.	
6				1- Rapid Test for Hydrophyt		n
7				2 - Dominance Test is >50%	ie regetatio	
	15	= Total Cov	er	✓ 3 - Prevalence Index is ≤ 3.0)1	
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptatio		supporting
1. <i>Phalaris arundinacea</i>	50	Yes	FACW	data in Remarks or on a separate	-	0
2. Phragmites australis	50	Yes	FACW	Problematic Hydrophytic Ve		xplain)
3. <i>Onoclea sensibilis</i>	20	No	FACW	¹Indicators of hydric soil and wet		
4				present, unless disturbed or prol	-	0,5
5				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) or more in	diameter at
7				breast height (DBH), regardless of	f height.	
8				Sapling/shrub – Woody plants les		DBH and
9				greater than or equal to 3.28 ft (1	m) tall.	
10.				Herb – All herbaceous (non-wood		egardless of
11				size, and woody plants less than		
12.				Woody vines – All woody vines gr	eater than 3	3.28 ft in
	120	= Total Cov	er	height.		
Woody Vine Stratum (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetation Present	? Yes	No
1.						
2.						
3.						
4.				•		
		= Total Cov		•		

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

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

Profile Des	cription: (Describe	to the	depth needed to d	docun	nent the	indicato	or confirm the a	absence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Text	ture	Remarks
0 - 12	7.5YR 4/1	90	5YR 4/6	10	С	M	Silty Cla	y Loam	
12 - 18	10YR 4/1	80	2.5YR 4/6	20	C	M	Clay I	Loam	
18 - 20	10YR 5/1	60	7.5YR 5/8	40	С	М	Clay I	Loam	
		_	-	_				_	
								_	
	•			_					
		- —							
		- —							
	-								
	•	- —							
		- —							
				_					
	Concentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² L		Lining, M = Matrix.
Hydric Soil								Indicators for Pi	roblematic Hydric Soils³:
Histoso			Polyvalue Be					2 cm Muck ((A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Su					Coast Prairie	e Redox (A16) (LRR K, L, R)
	istic (A3)		Loamy Muck	-		(LRR K, I	-)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4) ed Layers (A5)		Loamy Gleye Depleted Ma					Dark Surface	e (S7) (LRR K, L)
	ed Below Dark Surfa	ace (A1							elow Surface (S8) (LRR K, L)
	ark Surface (A12)	, cc (/ ti	Depleted Da)			urface (S9) (LRR K, L)
I	Mucky Mineral (S1)		Redox Depr			,		•	nese Masses (F12) (LRR K, L, R)
_	Gleyed Matrix (S4)				- (- /				oodplain Soils (F19) (MLRA 149B)
-	Redox (S5)								c (TA6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)							Red Parent I	
	ırface (S7) (LRR R, N	II RA 1	49R)					•	v Dark Surface (TF12)
			.52,					Other (Expla	ain in Remarks)
³ Indicators	of hydrophytic veg	etatior	and wetland hyd	rolog	y must b	e preser	t, unless disturbe	ed or problematic.	
Restrictive	Layer (if observed):								
	Type:		None			Hydric	Soil Present?		Yes No
	Depth (inches):								
Remarks:									
A positive i	ndication of hydric	soil wa	as observed. The o	riteri	on for hy	dric soil	is met.		
L									

Vegetation Photos





Photo of Sample Plot East



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery C	County	Sampling Date: 202	21-Sept-09
Applicant/Owner: SunEast		<u> </u>	State	e: NY	Sampling Point: W-JM	IP-16_PFO-1
Investigator(s): Jerry Peake, Ca	rson Rowe, Abi Lig	ht	Section, Tow	nship, Range: N	Α	
Landform (hillslope, terrace, etc.)): Depression		Local relief (concave	e, convex, none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA):L	RR L	.	Lat: 42.8523	36 Long:	-74.502468	Datum: WGS84
Soil Map Unit Name: Burdett	channery silt loam,	, BuB		_	NWI classificatio	n: None
Are climatic/hydrologic condition	is on the site typica	al for this time of ye	ar? Yes	∠_ No (If no	o, explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology ₋	significantly dis	sturbed? Are "	Normal Circums	tances" present?	Yes No
Are Vegetation, Soil,	or Hydrology ₋	naturally probl	ematic? (If ne	eded, explain an	y answers in Remarks.	.)
SUMMARY OF FINDINGS - A	Attach site map	showing samplir	ng point locations	s, transects, in	nportant features,	etc.
Hydrophytic Vegetation Present	? Yes _	✓_ No				
Hydric Soil Present?	Yes _	✓_ No	Is the Sampled Area	a within a Wetlan	nd? Yes	No
Wetland Hydrology Present?	Yes _	✓_ No	If yes, optional Wet	land Site ID:	W-IN	MP-16
Remarks: (Explain alternative pr	·	<u> </u>				
		•				
Covertype is PFO. Area is wetlan	a, all three wetland	u parameters are pr	esent.			
HYDROLOGY						
Walland Hadrala - Jadiaakana						
Wetland Hydrology Indicators:						ć
Primary Indicators (minimum of	one is required; cl	neck all that apply)			y Indicators (minimum	of two required)
∕ Surface Water (A1)	_•	∠ Water-Stained Lea	ives (B9)		e Soil Cracks (B6)	
<u>✓</u> High Water Table (A2)	_	_ Aquatic Fauna (B1	3)		age Patterns (B10)	
✓ Saturation (A3)	_	_ Marl Deposits (B1	5)		Trim Lines (B16)	
Water Marks (B1)	_	_ Hydrogen Sulfide	Odor (C1)	•	eason Water Table (C2)	
Sediment Deposits (B2)	_	_ Oxidized Rhizosph	eres on Living Roots	S((3)	sh Burrows (C8)	(60)
Drift Deposits (B3)	_	_ Presence of Reduc	ced Iron (C4)		ation Visible on Aerial II	
Algal Mat or Crust (B4)	_	_ Recent Iron Reduc	tion in Tilled Soils (C	61	ed or Stressed Plants (E) () (
Iron Deposits (B5)	_	_ Thin Muck Surface	e (C7)		orphic Position (D2)	
Inundation Visible on Aerial	lmagery (B7)	_ Other (Explain in F	Remarks)		w Aquitard (D3)	
Sparsely Vegetated Concave	Surface (B8)				topographic Relief (D4)	
Field Observations				FAC-N	eutral Test (D5)	
Field Observations: Surface Water Present?	Yes _✓_ No	Depth	(inches):	1		
Water Table Present?	Yes _ ✓ _ No	,	(inches):		Hydrology Present?	Yes No
Saturation Present?	Yes _ ✓ _ No		(inches):	0	lydrology Fresent:	163140
	163 <u>7</u> 110 _	Берит	(11101165).			
(includes capillary fringe)						
Describe Recorded Data (strean	n gauge, monitorin	g well, aerial photos	s, previous inspection	ns), if available:		
Remarks:						
The criterion for wetland hydrol	ngv is met A nosit	ive indication of wet	land hydrology was	observed (prima	inv and secondary indic	cators were present)
The chiefforf for wetland hydror	ogy is met. A posit	ive indication of wei	lianu nyurology was	observed (prima	iry and secondary muit	.ators were present).

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:	
		Species?	Status	Number of Dominant Species That	(A)
1. Tsuga canadensis	50	Yes	FACU	Are OBL, FACW, or FAC: Total Number of Dominant Species	
2. Acer saccharum	40	Yes	FACU	Across All Strata:	(B)
3. Tilia americana	25	No	FACU	Percent of Dominant Species That	
Betula alleghaniensis	15	No	FAC	Are OBL, FACW, or FAC:	(A/B)
-				Prevalence Index worksheet:	
6. 7.				Total % Cover of: Multiply E	<u>Зу:</u>
·	130	= Total Cov	er	OBL species 0 x 1 =	0
Sapling/Shrub Stratum (Plot size:15 ft)	150	_ 10ta1 cov	Ci	FACW species 10 x 2 =	20
. Carpinus caroliniana	25	Yes	FAC	FAC species 80 x 3 =	240
2. Acer saccharum	10	Yes	FACU	FACU species 135 x 4 =	540
3.		103	17100	UPL species 0 x 5 =	0
				Column Totals 225 (A)	800 (B)
				Prevalence Index = B/A = <u>3.6</u>	
				Hydrophytic Vegetation Indicators:	
				1- Rapid Test for Hydrophytic Vegetation	
·	35	= Total Cov	or	2 - Dominance Test is >50%	
Herb Stratum (Plot size:5 ft)		_ TOTAL COV	CI	$_{}$ 3 - Prevalence Index is $\leq 3.0^{\circ}$	
. Toxicodendron radicans	15	Yes	FAC	4 - Morphological Adaptations¹ (Provide s	supporting
2. Dryopteris intermedia	15	Yes	FAC	data in Remarks or on a separate sheet)	
3. Impatiens capensis	10	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Exp	
1. Ranunculus repens	10	Yes	FAC	¹Indicators of hydric soil and wetland hydrolog	gy must be
· · · · · · · · · · · · · · · · · · ·		165	FAC	present, unless disturbed or problematic	
5				Definitions of Vegetation Strata:	
5.				Tree – Woody plants 3 in. (7.6 cm) or more in d	liameter a
7				breast height (DBH), regardless of height.	DILand
3.				Sapling/shrub – Woody plants less than 3 in. D greater than or equal to 3.28 ft (1 m) tall.	DH allu
).				Herb – All herbaceous (non-woody) plants, reg	ardless of
10				size, and woody plants less than 3.28 ft tall.	ai aicss oi
11				Woody vines – All woody vines greater than 3.2	28 ft in
12				height.	
	50	_= Total Cov	er	Hydrophytic Vegetation Present? Yes No	0
Noody Vine Stratum (Plot size: 30 ft)				Trydrophydd Vegetadon Tresent. Tes N	·
. Parthenocissus quinquefolia	10	Yes	FACU		
2					
3.					
4					
	10	_= Total Cov	er		

Profile Des	cription: (Describe t	to the	depth needed to o			indicator	or confirm the ab	osence of indicato	ors.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ıro	Remarks
0 - 12	10YR 2/1	98	7.5YR 4/6	2	С	M	Silty Clay		Remarks
12 - 20	10YR 4/2	60	7.5YR 5/8	40	C	<u>M</u>	Silty C	lay	
				. —					
								_	
¹Type: C = 0	$\frac{1}{1}$	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked S	Sand Grains. ² Lo	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil			·		-				roblematic Hydric Soils ³ :
Histoso			Polyvalue Be	elow S	Surface (S	8) (LRR R,	, MLRA 149B)		(A10) (LRR K, L, MLRA 149B)
l ——	oipedon (A2)		Thin Dark Su						
	istic (A3)		Loamy Mucl						e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	-				Dark Surface	
Stratifie	d Layers (A5)		Depleted Ma	atrix (F3)				elow Surface (S8) (LRR K, L)
<u></u> Deplete	d Below Dark Surfa	ace (A1	1) <u>✓</u> Redox Dark	Surfa	ce (F6)			•	urface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da)			nese Masses (F12) (LRR K, L, R)
Sandy N	Mucky Mineral (S1)		Redox Depr	essio	ns (F8)			_	loodplain Soils (F19) (MLRA 149B)
Sandy C	Gleyed Matrix (S4)								c (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)							Red Parent	
Strippe	d Matrix (S6)								v Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, M	ILRA 1	49B)					Other (Expla	
31	- 6 leavelus es leavels						l	•	
-	of hydrophytic veg		and wetland nyc	irolog	y must b	e present,	, unless disturbed	d or problematic.	
Restrictive	Layer (if observed): _								
	Type:		None	-		Hydric S	Soil Present?		Yes No
	Depth (inches):								
Remarks:									
A positive in	ndication of hydric	soil wa	is observed. The o	riteri	on for hy	dric soil is	met.		

Vegetation Photos

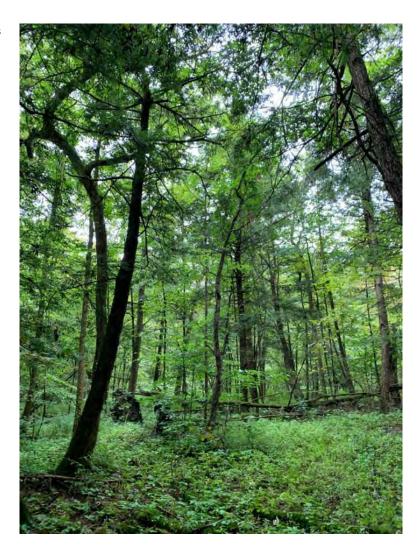






Photo of Sample Plot North



Photo of Sample Plot South



Project/Site: Flat Creek Solar Project/Site: Project/Site: Flat Creek Solar Project/Site: Project/Si	oject		City/County: Spra	kers, Montgomery County	Sampling Date: 2	2021-Sept-09
Applicant/Owner: SunEast				State: NY	Sampling Point: W-	JMP-16_UPL-1
Investigator(s): Jerry Peake, Ca	arson Rowe, A	bi Ligh	it	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.	.): Flat			Local relief (concave, con	vex, none): Convex	Slope (%): 0 to 1
Subregion (LRR or MLRA):	LRR L			Lat: 42.852286978	5 Long: -74.5025258588	Datum: WGS84
Soil Map Unit Name: Burdett	channery silt l	oam, E	BuB		NWI classificat	i on: None
Are climatic/hydrologic condition	ns on the site t	typical	for this time of year	ar? Yes 🟒 No	(If no, explain in Remark	s.)
Are Vegetation, Soil,	or Hydrol	ogy _	significantly dis	turbed? Are "Norm	al Circumstances" present?	Yes No
Are Vegetation, Soil,	or Hydrol	ogy _	naturally probl	ematic? (If needed,	explain any answers in Remar	ks.)
SUMMARY OF FINDINGS – A	Attach site r	nan c	howing samplin	ng noint locations trai	nsects important features	: etc
				ig point locations, trai	isects, important reatures	5, etc.
Hydrophytic Vegetation Present	t?	Yes _	No _ _ _			
Hydric Soil Present?		Yes _	No _ _ _	Is the Sampled Area with	in a Wetland?	⁄es No <u>_</u> ✓
Wetland Hydrology Present?		Yes _	No ∠	If yes, optional Wetland S	ite ID:	
	rocedures her			•		
Remarks: (Explain alternative pr						
Covertype is UPL. Area is upland	d, not all three	wetla	nd parameters are	present.		
,	.,					
HYDROLOGY						
Madamal Hudualami Indiasasusi						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	f ana is raquir	ad: ch	ack all that apply)		Secondary Indicators (minimu	im of two required)
Primary Indicators (minimum of	i one is require	ea; cne	eck all that apply)		Secondary Indicators (minimu	<u>im oi two requirea)</u>
S			Makan Chain ad Las	(DO)	Surface Soil Cracks (B6)	
Surface Water (A1)			Water-Stained Lea		Drainage Patterns (B10)	
High Water Table (A2)			Aquatic Fauna (B1		Moss Trim Lines (B16)	
Saturation (A3)			Marl Deposits (B15		Dry-Season Water Table (C	~2)
Water Marks (B1)			Hydrogen Sulfide	Odor (C1)	Crayfish Burrows (C8)	.2)
Sediment Deposits (B2)			Oxidized Rhizosph	eres on Living Roots (C3)	•	l Imp = == = (CO)
Drift Deposits (B3)			Presence of Reduc	ed Iron (C4)	Saturation Visible on Aeria	
Algal Mat or Crust (B4)				tion in Tilled Soils (C6)	Stunted or Stressed Plants	s (D1)
Iron Deposits (B5)			Thin Muck Surface		Geomorphic Position (D2)	
	I(D.7)				Shallow Aquitard (D3)	
Inundation Visible on Aerial			Other (Explain in F	temarks)	Microtopographic Relief (D	04)
Sparsely Vegetated Concave	: Surface (B8)				FAC-Neutral Test (D5)	,
					FAC-Neutral Test (D3)	
Field Observations:						
Surface Water Present?	Yes	No _	∠ Depth (inches):		
Water Table Present?	Yes	No .	/ Denth (inches):	Wetland Hydrology Present?	Yes No _ _ ✓
					- Wedand Hydrology Fresence	165 110
Saturation Present?	Yes	. No _ _	∠ Depth (inches):	_	
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge, moni	itoring	well, aerial photos	, previous inspections), if	available:	
Remarks:						
The criterion for wetland hydro	logy is not me	t. No n	ositive indication of	of wetland hydrology was	observed.	
	٠, ٠.٠٠٠٠٠					
ı						

<u>Gree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	2	(A)
1. <i>Tsuga canadensis</i>	60	Yes	FACU	Are OBL, FACW, or FAC:		(/-()
2. Acer saccharum	35	Yes	FACU	Total Number of Dominant Species	8	(B)
3. Fagus grandifolia	15	No	FACU	Across All Strata:		`
1.				Percent of Dominant Species That	25	(A/B)
5.	· ·			Are OBL, FACW, or FAC:		
5.				Prevalence Index worksheet:	N. A Hailands	D
7.				Total % Cover of: OBL species 0	$\frac{\text{Multiply I}}{\times 1} =$	ву. О
	110	= Total Cove	er	· ———	_	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	' <u>'</u>	=		· ———	x 2 = _	60
1. Acer saccharum	15	Yes	FACU	· —	x3=	
2. Fagus grandifolia	10	Yes	FACU	FACU species 145	x 4 =	580
3.				UPL species 0	x 5 = _	0
l				Column Totals 165	(A) _	640 (B)
5.				Prevalence Index = B/A =	3.9	
5.	· ——			Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic Ve	egetation	
	25	= Total Cove	er	2 - Dominance Test is > 50%		
Herb Stratum (Plot size:5 ft)		-		3 - Prevalence Index is ≤ 3.0¹		
1. Toxicodendron radicans	10	Yes	FAC	4 - Morphological Adaptations		supporting
2. Fagus grandifolia	5	Yes	FACU	data in Remarks or on a separate she		
3. Fraxinus americana	5	Yes	FACU	Problematic Hydrophytic Vegeta		•
4.				¹Indicators of hydric soil and wetland	-	gy must be
 5.				present, unless disturbed or problem	iatic	
				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or	moro in c	diameter a
-				breast height (DBH), regardless of he		ilameter a
7. 8.				Sapling/shrub – Woody plants less th		BH and
				greater than or equal to 3.28 ft (1 m)		211 0110
10				Herb – All herbaceous (non-woody) p		gardless of
				size, and woody plants less than 3.28		,
-	· ——			Woody vines – All woody vines greate		28 ft in
2	20	= Total Cove		height.		
Monda Vina Stratum (Plat size 20 ft)		_ TOTAL COVE	:1	Hydrophytic Vegetation Present? Ye	es N	o 🗸
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>) 1. <i>Vitis riparia</i>	10	Yes	FAC			
. <u>vius riparia</u>		163	FAC			
				-		
				-		
1.		- Tatal C:		.		
-	10	_= Total Cove	er			

	•	to the de	•			ndicator	or confirm the al	osence of indica	tors.)
Depth	Matrix		Redox			12	T		Dama and a
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks
0-3	10YR 2/2	100		_			Silt Loam		
3 - 15	10YR 3/3	100		_			Silt Loam		
				_					
				_					
				_					
				-					
1T	tti D	Danlasia	- DM Deduced		-i N4C	N 4 l l	Cond Code and State		- Linin - M. Makete
		Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² Lo		re Lining, M = Matrix.
Hydric Soil Inc								Indicators for I	Problematic Hydric Soils ³ :
Histosol (A	•		•				R, MLRA 149B)	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
	pedon (A2)		Thin Dark Su					Coast Prair	ie Redox (A16) (LRR K, L, R)
Black Hist			Loamy Mucky			(LRR K, L)	5 cm Muck	y Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Loamy Gleye					Dark Surfa	ce (S7) (LRR K, L)
	Layers (A5)		Depleted Ma] Redox Dark S					Polyvalue E	Below Surface (S8) (LRR K, L)
	s Surface (A12)	ace (ATT)	Depleted Dark					Thin Dark S	Surface (S9) (LRR K, L)
	cky Mineral (S1)		Redox Depre					Iron-Manga	anese Masses (F12) (LRR K, L, R)
-	•		Redox Depre	55101	IS (FO)			Piedmont F	Floodplain Soils (F19) (MLRA 149B)
-	yed Matrix (S4)							Mesic Spoo	lic (TA6) (MLRA 144A, 145, 149B)
Sandy Red								Red Parent	Material (F21)
Stripped N								Very Shallo	w Dark Surface (TF12)
Dark Surfa	ace (S7) (LRR R, N	/ILRA 149	9B)						lain in Remarks)
3Indicators of	hydrophytic veg	etation a	and wetland hydr	olog	y must be	e presen	t, unless disturbe	d or problemation	c
Restrictive La	yer (if observed):	:							
Ty	/pe:		None			Hydric	Soil Present?	Yes _	No⁄_
D	epth (inches):			•					
Remarks:	1 , ,	_				1			
No positive in	dication of hydri	ic soils w	as observed. The	e crite	erion for	hydric so	il is not met. Refu	isal due to coars	se fragments.



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	Sampling	Date: 2021-Sept-09
Applicant/Owner: SunEast			State: NY	Sampling P	oint: W-JMP-16_UPL-2
Investigator(s): Jerry Peake, Ca	rson Rowe, Abi Lig	ht	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.)): Terrace		Local relief (concave, conv	ex, none): None	Slope (%): 0 to 1
Subregion (LRR or MLRA):	.RR L		Lat: 42.851634883	2 Long: -74.502928	32248 Datum: WGS84
Soil Map Unit Name: Ilion silt l	oam, IIA			NWI c	lassification: None
Are climatic/hydrologic condition	s on the site typica	ol for this time of year	ar? Yes <u></u> ✓ No	(If no, explain in	Remarks.)
Are Vegetation <u></u> , Soil,	or Hydrology _	significantly dis	turbed? Are "Norm	al Circumstances" pres	sent? Yes No 🟒
Are Vegetation, Soil,	or Hydrology _	naturally proble	ematic? (If needed,	explain any answers i	n Remarks.)
SUMMARY OF FINDINGS – A	Attach site map	showing samplin	g point locations, trai	nsects, important f	eatures, etc.
Hydrophytic Vegetation Present		✓_ No	1	· · · · · · · · · · · · · · · · · · ·	
			latha Camanlad Anas with	: \\\	Von No (
Hydric Soil Present?		_ ∠ _ No	Is the Sampled Area with	in a weuand?	Yes No
Wetland Hydrology Present?	Yes _	No _ _ _	If yes, optional Wetland	Site ID:	
Remarks: (Explain alternative pro-	ocedures here or i	n a separate report)			
HYDROLOGY					
Watland Hudrology Indicators					
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of</u>	one is required: ch	neck all that apply)		Secondary Indicators	(minimum of two required)
- mary marcacors (minimum or	<u>one is required, er</u>	reck all triat apply)		Surface Soil Crack	
Surface Water (A1)		_ Water-Stained Lea		Drainage Patterns	
High Water Table (A2)		_ Aquatic Fauna (B13		Moss Trim Lines (I	
Saturation (A3)		_ Marl Deposits (B15		Dry-Season Water	
Water Marks (B1)		_ Hydrogen Sulfide (Crayfish Burrows	(C8)
Sediment Deposits (B2) Drift Deposits (B3)	_	_ Oxidized Rhizosph _ Presence of Reduc	eres on Living Roots (C3)	Saturation Visible	on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_		tion in Tilled Soils (C6)	Stunted or Stresse	ed Plants (D1)
Iron Deposits (B5)		_ Thin Muck Surface		Geomorphic Posit	
Inundation Visible on Aerial I	magery (B7)	_ Other (Explain in R		Shallow Aquitard	
Sparsely Vegetated Concave		_ Other (Explain in it	erriar koj	Microtopographic	
				✓ FAC-Neutral Test (D5)
Field Observations:	.,	5 11 6			
Surface Water Present?	Yes No _				
Water Table Present?	Yes No _	<u>✓</u> Depth (inches):	Wetland Hydrology P	resent? Yes No
Saturation Present?	Yes No _	✓ Depth (inches):		
(includes capillary fringe)					
Describe Recorded Data (stream	n gauge monitorin	g well aerial nhotos	nrevious inspections) if	available:	
	. 88-,	6 · · · · · · · · · · · · · · · · · · ·	, p		
Para autor					
Remarks:			Parkan alaman		
The criterion for wetland hydrol	ogy is not met. Onl	ly one secondary inc	dicator observed.		

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	2	(4)
1.	-	· · ·		Are OBL, FACW, or FAC:	2	(A)
2.				Total Number of Dominant Species Across All Strata:	2	(B)
3. 4.				Percent of Dominant Species That	100	(A/B)
5.				Are OBL, FACW, or FAC:		
6.				Prevalence Index worksheet:	N. de alecter la c	D
7.				- OBL species 0	Multiply x 1 =	<u>ву:</u> 0
	0	= Total Cov	er		-	
Sapling/Shrub Stratum (Plot size:15 ft)		_		· ——	x 2 = _	100
1.				FAC species 50	x 3 = _	150
2.				FACU species 0	x 4 =	0
)				- UPL species 0	x 5 =	0
5. 4.				- Column Totals 100	(A)	250 (B)
5.				Prevalence Index = B/A =	2.5	
				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic \	/egetation	1
		= Total Cov	or	2 - Dominance Test is >50%		
Llorb Stratum (Plot size) Eft)		_ 10tal COV	ei	$_{\checkmark}$ 3 - Prevalence Index is ≤ 3.0 ¹		
Herb Stratum (Plot size: <u>5 ft</u>)	Ε0.	V	EA CIA/	4 - Morphological Adaptations	¹ (Provide	supporting
1. Phalaris arundinacea	50	Yes	FACW	data in Remarks or on a separate sh	neet)	
2. <i>Setaria pumila</i>	50	Yes	FAC	 Problematic Hydrophytic Vege 	tation¹ (Ex	kplain)
3.				lndicators of hydric soil and 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) o	r more in	diameter at
7				breast height (DBH), regardless of h	_	
8				Sapling/shrub – Woody plants less t		DBH and
9				greater than or equal to 3.28 ft (1 m		
10				Herb – All herbaceous (non-woody)		gardless of
11				size, and woody plants less than 3.2		
12				Woody vines – All woody vines grea	ter than 3	.28 ft in
	100	= Total Cov	er	height.		
Woody Vine Stratum (Plot size:30 ft)		=		Hydrophytic Vegetation Present?	Yes 🟒 N	No
1.						
2.				-		
3.				-		
4.				-		
T1		= Total Cov	or	-		
	U	- Total Cov	CI			

	•	to the c	•			indicato	r or confirm the al	bsence of indicators.)
Depth (inches)	Matrix	0/	Redox			1002	Touturo	Domarka
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	
0 - 6	10YR 3/2	100	10\/D F /0	15			Clay Loar	
6 - 20	10YR 4/1	85	10YR 5/8	15	C	M	Clay Loar	<u> </u>
				· —				
				. —				
	_							
				. —				
¹Type: C = 0	Concentration, D =	Depleti	on, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. ² Le	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	low S	urface (S	88) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su					Coast Prairie Redox (A16) (LRR K, L, R)
	istic (A3)		Loamy Muck					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 (- 3)			Polyvalue Below Surface (S8) (LRR K, L)
	ed Below Dark Surf	ace (A1						Thin Dark Surface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da)		Iron-Manganese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_	Redox (S5)							Red Parent Material (F21)
Strippe	d Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, I	MLRA 14	19B)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	•
Restrictive	Layer (if observed)):						
	Type:		None			Hydric	Soil Present?	Yes∕_ No
	Depth (inches):					'		
Remarks:						l .		-
	ndication of hydric	soil wa	s observed. The c	riterio	on for hy	dric soil	is met.	

Vegetation Photos





Photo of Sample Plot North



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	ject City/County:	Sprakers, Montgomery County	Sampling Date:	2021-Sept-09
Applicant/Owner: SunEast		State: NY	Sampling Point: W	/-JMP-17_PFO-1
Investigator(s): Jerry Peake, Car	rson Rowe, Abi Light	Section, Township, I	Range: NA	
Landform (hillslope, terrace, etc.):	: Hillslope	Local relief (concave, conve	ex, none): Concave	Slope (%): 2 to 5
Subregion (LRR or MLRA):	RR L	Lat: 42.853082	Long: -74.509296	Datum: WGS84
Soil Map Unit Name: Darien si	t loam, DaB		NWI classifica	ation: None
Are climatic/hydrologic condition:	s on the site typical for this time	of year? Yes No _	(If no, explain in Remarl	ks.)
Are Vegetation, Soil,	or Hydrology significan	itly disturbed? Are "Norma	l Circumstances" present?	Yes _ ✓ No
Are Vegetation, Soil,	or Hydrology naturally	problematic? (If needed, e	explain any answers in Rema	rks.)
SUMMARY OF FINDINGS – A	ttach site map showing sa	mpling point locations, tran	sects, important feature	es, etc.
Hydrophytic Vegetation Present?	Yes 🗸 No			
Hydric Soil Present?	Yes _ ✓ No	Is the Sampled Area within	a a Watland?	/es No
		•		
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Sit	e ID:	N-JMP-17
Remarks: (Explain alternative pro	•	•		
Covertype is PFO. Area is wetland	d, all three wetland parameters	are present.		
HYDROLOGY				
Wetland Hydrology Indicators:				
Primary Indicators (minimum of	one is required: check all that a	only)	Secondary Indicators (minim	um of two required)
Trimary malcators (minimari or	one is required, effect all that a	55.31	Surface Soil Cracks (B6)	ani oi two requireaz
<u>✓</u> Surface Water (A1)	<u></u> Water-Staine		✓ Drainage Patterns (B10)	
High Water Table (A2)	<u></u> Aquatic Faur		Moss Trim Lines (B16)	
<u></u> Saturation (A3)	Marl Deposi		Dry-Season Water Table (C2)
Water Marks (B1)	, ,	ulfide Odor (C1)	Crayfish Burrows (C8)	,
Sediment Deposits (B2)		zospheres on Living Roots (C3)	Saturation Visible on Aeri	al Imagery (C9)
Drift Deposits (B3)		Reduced Iron (C4)	 Stunted or Stressed Plant	
Algal Mat or Crust (B4)		Reduction in Tilled Soils (C6)	 ✓ Geomorphic Position (D2	
Iron Deposits (B5)	Thin Muck S	urface (C7)	Shallow Aquitard (D3)	
Inundation Visible on Aerial I		in in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave	Surface (B8)		FAC-Neutral Test (D5)	
Field Observations:				
Surface Water Present?	Yes No	Depth (inches): 1		
Water Table Present?	Yes No	Depth (inches):	Wetland Hydrology Present?	Yes No
Saturation Present?	Yes _ ✓ _ No	Depth (inches): 0		
(includes capillary fringe)		· · · · · · · · · · · · · · · · · · ·		
-	gauge monitoring well aerial r	photos, previous inspections), if a	vailable:	
Describe Recorded Data (Stream	gauge, monitoring wen, denui p	motos, previous inspections,, ii u	valiable.	
Remarks:				
The criterion for wetland hydrolo	ogy is met. A positive indication	of wetland hydrology was observ	ed (primary and secondary i	ndicators were present).
1				

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That		
Teura canadonsis	40		FACU	Are OBL, FACW, or FAC:	5	(A)
 Tsuga canadensis Fagus grandifolia 	30	Yes Yes	FACU	Total Number of Dominant Species		
2. Fagus grandifolia 3. Ulmus americana	30	Yes	FACU	Across All Strata:	9	(B)
4. Acer saccharum	25	Yes	FACU	Percent of Dominant Species That	55.6	(A /D)
5.		165	FACU	Are OBL, FACW, or FAC:		(A/B)
5,				Prevalence Index worksheet:		
7.				Total % Cover of:	Multiply E	•
•	125	= Total Cov	er	OBL species 0	x 1 =	0
Sapling/Shrub Stratum (Plot size:15 ft)		_	. .	FACW species 115	x 2 =	230
1. Tsuga canadensis	15	Yes	FACU	FAC species 15	x 3 =	45
2. Ulmus americana	10	Yes	FACW	FACU species 140	x 4 =	560
3. Fagus grandifolia	5	No	FACU	UPL species 0	x 5 =	0
4.			17100	Column Totals 270	(A)	835 (B)
5.				Prevalence Index = B/A =	3.1	
5.				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic	Vegetation	
	30	= Total Cov	er	✓ 2 - Dominance Test is >50%		
Herb Stratum (Plot size: _ 5 ft)		- 10tai cov	Ci	3 - Prevalence Index is $\leq 3.0^{1}$		
1. Impatiens capensis	50	Yes	FACW	4 - Morphological Adaptations	-	upporting
2. Onoclea sensibilis	25	Yes	FACW	data in Remarks or on a separate sl	-	
3. Parthenocissus quinquefolia	15	No	FACU	Problematic Hydrophytic Vege		
4. Solidago canadensis	10	No	FACU	¹Indicators of hydric soil and wetlar	, ,	y must be
5.			17100	present, unless disturbed or proble	mauc	
6.				Definitions of Vegetation Strata:		
7.				Tree – Woody plants 3 in. (7.6 cm) o breast height (DBH), regardless of h		iameter a
8.				Sapling/shrub – Woody plants less t		RH and
9.				greater than or equal to 3.28 ft (1 m		Di i di id
10.				Herb – All herbaceous (non-woody)		ardless of
·				size, and woody plants less than 3.2		
11				Woody vines – All woody vines grea	ter than 3.2	28 ft in
12	100	- Total Cov		height.		
Mondy Vino Stratum (Plot size: 20 ft)	100	_= Total Cov	CI	Hydrophytic Vegetation Present?	Yes _ 🗸 No	o
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>) 1. <i>Vitis riparia</i>	15	Yes	FAC			
2.		162	FAC			
3						
1		= Total Cov	·or			
4	15					

	•	to the de	•			indicato	r or confirm the at	osence of indicators.)
Depth _	Matrix	 .	Redox				_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0 - 10	10YR 2/1	100					Clay Loan	
10 - 20	10YR 2/1	97	7.5YR 4/6	3	C	M	Clay Loan	n
				_				
-								
-								
-				_				
				_				
_				_				
				_				
		· ·		-				
1T C - C		Danlatia	n DM - Dadwaad	N 4 - 4	-iv MC -	NA salva d	Canal Cuaina 21 a	
	Concentration, D =	Depletio	n, RIVI = Reduced	wat	rix, ivi5 =	Masked	Sand Grains. ² LC	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil						==		Indicators for Problematic Hydric Soils ³ :
Histosol			•				R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark Su					Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi			Loamy Mucky			(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surface (S7) (LRR K, L)
	d Layers (A5) d Below Dark Surfa		Depleted Mar					Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)	ace (ATT)	Depleted Dark			`		Thin Dark Surface (S9) (LRR K, L)
	fucky Mineral (S1)		Redox Depre			,		Iron-Manganese Masses (F12) (LRR K, L, R)
-	Gleyed Matrix (S4)		Redox Depile	33101	15 (1-0)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	•							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_	ledox (S5)							Red Parent Material (F21)
	d Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M	1LRA 149	9B)					Other (Explain in Remarks)
3Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must b	e preser	nt, unless disturbe	d or problematic.
Restrictive I	_ayer (if observed):							
	Type:		None			Hydric	Soil Present?	Yes No
	Depth (inches):			•				
Remarks:						· ·		
	ndication of hydric	soil was	observed. The cr	iterio	on for hy	dric soil	is met.	

Hydrology Photos



Vegetation Photos



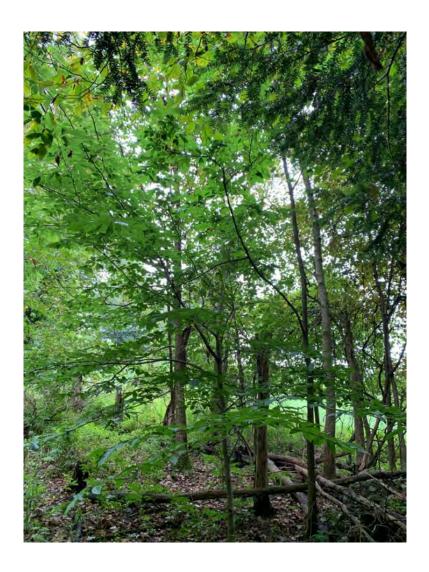




Photo of Sample Plot North

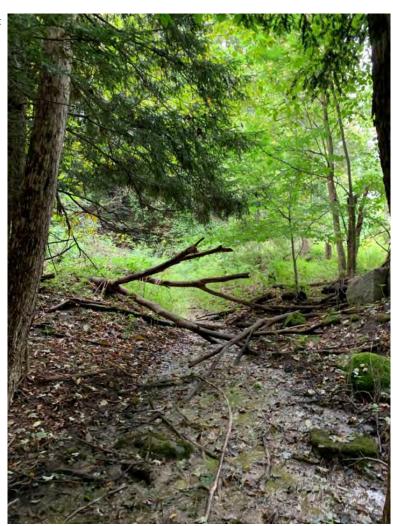


Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	akers, Montgomery County	Samp	oling Date: 2021	-Sept-09
Applicant/Owner: SunEast			State: NY	Samplir	ng Point: W-JMP-	-17_UPL-1
Investigator(s): Jerry Peake, Ca	rson Rowe, Abi Ligh	ht	Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.)	: Hillslope		Local relief (concave, conv	ex, none): None		Slope (%): 2 to 5
Subregion (LRR or MLRA):	RR L		Lat: 42.853073782	7 Long: -74.509)3976599 [Datum: WGS84
Soil Map Unit Name: Darien si	lt loam, DaB			N	WI classification:	None
Are climatic/hydrologic condition	s on the site typica	l for this time of ye	ar? Yes <u>✓</u> No	(If no, explai	n in Remarks.)	
Are Vegetation, Soil,	or Hydrology _	significantly di	sturbed? Are "Norm	al Circumstances"	present? Ye	es 🟒 No
Are Vegetation, Soil,	or Hydrology _	naturally prob	ematic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – <i>F</i>	Attach site man	showing sampli	ng noint locations, trai	sects importa	nt fastures et	c
Hydrophytic Vegetation Present	-	No/_	 	isects, importai		<u> </u>
Hydric Soil Present?		No	Is the Sampled Area withi	n a Wetland?	Ves	No
			·		163_	
Wetland Hydrology Present? Remarks: (Explain alternative pr		No	If yes, optional Wetland S	ite ID:		
Wetland Hydrology Indicators: Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	· 	Water-Stained Lea Aquatic Fauna (B1 Marl Deposits (B1 Hydrogen Sulfide	3) 5)	Crayfish Burro	racks (B6) erns (B10) les (B16) /ater Table (C2)	
Drift Deposits (B3)		Presence of Redu			essed Plants (D1	
Algal Mat or Crust (B4)			ction in Tilled Soils (C6)	Geomorphic F		
Iron Deposits (B5) Inundation Visible on Aerial I		_ Thin Muck Surface _ Other (Explain in l		Shallow Aquit		
Sparsely Vegetated Concave		_ Other (Explain iii i	Remarks)	Microtopogra	phic Relief (D4) est (D5)	
Field Observations:						
Surface Water Present?	Yes No _	<u>✓</u> Depth	(inches):			
Water Table Present?	Yes No	<u>✓</u> Depth	(inches):	Wetland Hydrolog	gy Present?	Yes No _ ✓
Saturation Present?	Yes No _		(inches):			
(includes capillary fringe)				-		
Describe Recorded Data (stream	gauge monitoring	well perial photo	s provious inspections) if	l available:		_ -
Remarks: The criterion for wetland hydrol					_	

				T		1
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	0	(4)
1. Tsuga canadensis	60	Yes	FACU	Are OBL, FACW, or FAC:		(A)
Tilia americana	30	Yes	FACU	Total Number of Dominant Species	5	(B)
3. Acer saccharum	25	No	FACU	Across All Strata:		(B)
4. Fagus grandifolia	15	No	FACU	Percent of Dominant Species That	0	(A/B)
5.		110	17100	Are OBL, FACW, or FAC:		(A/B)
6.				Prevalence Index worksheet:		
7.				Total % Cover of:	Multiply	By:
,	120	= Total Cov		OBL species 0	x 1 =	0
Condition (Charles Charles (Diet sines AF ft.)	130	- 10tal Cov	er	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)	4.5	V	FACIL	FAC species 0	x 3 =	0
1. Tsuga canadensis	15	Yes	FACU	FACU species 165	x 4 =	660
2. Acer saccharum	10	Yes	FACU	UPL species 0	x 5 =	0
3				Column Totals 165	(A)	660 (B)
4				Prevalence Index = B/A =	4	· · ·
5				Hydrophytic Vegetation Indicators:		·
6.					Vogotation	
7				1- Rapid Test for Hydrophytic	regetation	'
	25	= Total Cov	er	2 - Dominance Test is > 50%		
Herb Stratum (Plot size: 5 ft)		='		3 - Prevalence Index is ≤ 3.0¹	1 (Dura dala	
1. Parthenocissus quinquefolia	10	Yes	FACU	4 - Morphological Adaptations	-	supporting
2.				data in Remarks or on a separate sh		un la im)
3.				Problematic Hydrophytic Vege		•
4.				¹Indicators of hydric soil and wetlan		gy must be
5.				present, unless disturbed or proble	matic	
				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) o		diameter at
7				breast height (DBH), regardless of h	_	
8.				Sapling/shrub – Woody plants less t		JBH and
9				greater than or equal to 3.28 ft (1 m		
10				Herb – All herbaceous (non-woody)		gardiess of
11				size, and woody plants less than 3.2		20.66
12				Woody vines – All woody vines grea	ter than 3	.28 IL IN
	10	= Total Cov	er	height.		-
Woody Vine Stratum (Plot size:30 ft)				Hydrophytic Vegetation Present?	Yes N	√o <u>√</u>
1.						
2.						
3.						
4.						
· ·	0	= Total Cov	er			
		- Total Cov				
Remarks: (Include photo numbers here or on a separat						
No positive indication of hydrophytic vegetation was ob	served (≥	50% of don	ninant specie	es indexed as FAC– or drier).		

Profile Des	cription: (Describe	to the de	epth needed to de	ocun	nent the i	ndicator	or confirm the a	bsence of indicators	.)	
Depth	Matrix		Redox	Feat	tures					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture			Remarks
0 - 7	10YR 2/2	100					Clay Loam			
7 - 10	10YR 3/2	80	5YR 4/6	3	С	M	Hemic Clay Loam			
7 - 10	10YR 4/3	17		_			Clay	y Loam		
10 - 16	10YR 4/3	80		_			Silt	Loam		
10 - 16	10YR 3/2	20		_				Loam		
10 10	1011(3/2			_			3110	Loam		
				_						
				_						
				_						
				_						
				_						
				_						
				_						
¹Type: C = 0	Concentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Li	ning, M	= Matrix.
Hydric Soil	Indicators:							Indicators for Prob	olematic	Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Bel	ow S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck (A1	0) (LRR k	K. L. MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Sui	face	(S9) (LRR	R, MLR	A 149B)	Coast Prairie R		•
Black H	istic (A3)		Loamy Mucky	/ Mir	eral (F1)	(LRR K, L	.)			at (S3) (LRR K, L, R)
Hydrog	en Sulfide (A4)		Loamy Gleye					Dark Surface (S		
	ed Layers (A5)		Depleted Ma					Polyvalue Belo		· ·
	ed Below Dark Surfa							Thin Dark Surf		
	ark Surface (A12)		Depleted Dar							es (F12) (LRR K, L, R)
Sandy N	Mucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			•		oils (F19) (MLRA 149B)
Sandy 0	Gleyed Matrix (S4)									RA 144A, 145, 149B)
Sandy I	Redox (S5)							Red Parent Ma		
Strippe	d Matrix (S6)							Very Shallow D		
Dark Su	urface (S7) (LRR R, N	ILRA 149	9B)					Other (Explain		
								•	III Keiiia	11 K5)
	of hydrophytic veg		and wetland hydr	olog	y must be	e presen	t, unless disturbe	ed or problematic.		
Restrictive	Layer (if observed):									
	Type:		None			Hydric	Soil Present?		Yes	_ No / _
	Depth (inches):									
Remarks:										
No positive	indication of hydri	c soils w	as observed. The	crite	erion for l	hydric so	oil is not met.			
'	,					,				

Vegetation Photos



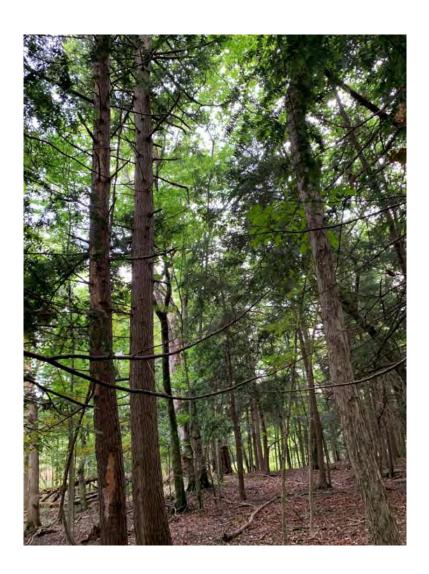




Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Project	ect City/County: Spr	akers, Montgomery County	Sampling Date	2021-Sept-09
Applicant/Owner: SunEast		State: NY	Sampling Point:	W-JMP-18_PEM-1
Investigator(s): Jerry Peake, Car	son Rowe, Abi Light	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.):	Flat	Local relief (concave, conv	ex, none): Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA): LR	RR L	Lat: 42.861307575	7 Long: -74.5135815327	Datum: WGS84
Soil Map Unit Name: Churchvill	e silty clay loam, ChB		NWI classif	ication: None
Are climatic/hydrologic conditions	on the site typical for this time of ye		(If no, explain in Rem	arks.)
Are Vegetation 🟒, Soil 🟒,	or Hydrology significantly di		al Circumstances" present?	Yes No _ _ /
Are Vegetation, Soil,	or Hydrology naturally prob	lematic? (If needed,	explain any answers in Ren	narks.)
SUMMARY OF FINDINGS – At	ttach site map showing sampli	ng point locations, trar	nsects, important featu	res, etc.
Hydrophytic Vegetation Present?		<u> </u>	<u> </u>	
Hydric Soil Present?	Yes _ ✓ No	Is the Sampled Area withi	n a Watland?	Voc. / No
•		·		Yes/_ No
Wetland Hydrology Present?	Yes No cedures here or in a separate report	If yes, optional Wetland Si	ite ID:	W-JMP-18
Wetland Hydrology Indicators: Primary Indicators (minimum of of control of c	Presence of Redu Recent Iron Redu Thin Muck Surfac nagery (B7) Other (Explain in	aves (B9) 13) 15) Odor (C1) heres on Living Roots (C3) iced Iron (C4) ction in Tilled Soils (C6) e (C7)	Secondary Indicators (mini Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Active Stunted or Stressed Placy Geomorphic Position (I	e (C2) erial Imagery (C9) ants (D1) D2)
			✓ FAC-Neutral Test (D5)	
Field Observations:				
Surface Water Present?	·	(inches):		
Water Table Present?	Yes No Depth	(inches):	Wetland Hydrology Preser	nt? Yes No
Saturation Present?	Yes No Depth	(inches): 0		
(includes capillary fringe)				
	gauge, monitoring well, aerial photo	s, previous inspections), if a	available:	
Remarks: The criterion for wetland hydrolog	gy is met. A positive indication of we	etland hydrology was obser	ved (primary and secondary	y indicators were present).

Trop Stratum (Blot size: 20 ft)	Absolute	Dominant	Indicator	Dominance Test worksl	Dominance Test worksheet:				
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	% Cover	Species?	Status	Number of Dominant S	pecies That	2	(A)		
1				Are OBL, FACW, or FAC:					
2				Total Number of Dominant Species Across All Strata:		2	(B)		
3									
4				Percent of Dominant Sp Are OBL, FACW, or FAC:		100	(A/B)		
5				Prevalence Index works					
6				Total % Cover		Multiply	Bv:		
7				- OBL species	 65	x 1 =	 65		
	0	= Total Cov	er	FACW species	100	x 2 =	200		
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	5	x 3 =	15		
1				FACU species	0	x 4 =	0		
2				- UPL species	0	x 5 =	0		
3				Column Totals	170	(A)	280 (B)		
4				Prevalence In		1.6	200 (2)		
5				Hydrophytic Vegetation					
6				1- Rapid Test for H		/ogotation			
7				2 - Dominance Tes		regetation			
	0	= Total Cov	er	✓ 3 - Prevalence Ind					
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological		l (Provide	sunnorting		
1. <i>Phalaris arundinacea</i>	100	Yes	FACW	data in Remarks or on a			supporting		
2. <i>Lythrum salicaria</i>	40	Yes	OBL	Problematic Hydr			plain)		
3. <i>Typha latifolia</i>	25	No	OBL	¹Indicators of hydric so			•		
4. <i>Setaria pumila</i>	5	No	FAC	present, unless disturb		-	5)		
5				Definitions of Vegetation	n Strata:				
6.				Tree – Woody plants 3 i		more in c	diameter at		
7.				breast height (DBH), re	gardless of h	eight.			
8.				Sapling/shrub - Woody	plants less t	han 3 in. D	BH 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					
12.				Woody vines – All wood	ly vines great	ter than 3.	28 ft in		
	170	= Total Cov	er	height.					
Woody Vine Stratum (Plot size:30 ft)	-	-		Hydrophytic Vegetatio	n Present?	∕es <u> </u>	lo		
1.									
2.									
3.				•					
4.				•					
· · ·		= Total Cov	er	-					
			<u> </u>	_					

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).

	cription: (Describe	to the d	•			ndicato	or confirm the al	bsence of indicato	ors.)
Depth _	Matrix	04	Redox			Loc2	Toyete		Domarke
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Text		Remarks
0 - 6	10YR 3/1	100					Silty Clay		
6 - 12	10YR 3/1	90	7.5YR 3/4	10	C	<u>M</u>	Silty Clay		
12 - 20	10YR 2/1	85	5YR 3/4	15	C	M	Clay L	oam	
								_	
-		·							
¹Type: C = C	Concentration, D =	Depletion	on, RM = Reduced	Mati	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	E Lining, M = Matrix.
Hydric Soil									roblematic Hydric Soils³:
Histoso			Polyvalue Be	low S	urface (S	8) (LRR I	R, MLRA 149B)		•
	oipedon (A2)		Thin Dark Su						A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R)
Black Hi			Loamy Muck						Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	-				Dark Surface	
Stratifie	d Layers (A5)		Depleted Ma	itrix (f	- 3)				elow Surface (S8) (LRR K, L)
Deplete	d Below Dark Surf	ace (A11) Redox Dark	Surfa	ce (F6)			•	urface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da						nese Masses (F12) (LRR K, L, R)
Sandy N	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)				oodplain Soils (F19) (MLRA 149B)
Sandy G	Gleyed Matrix (S4)								c (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)							Red Parent I	
Stripped	d Matrix (S6)								v Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, N	/ILRA 14	9B)					Other (Expla	
3Indicators	of hydrophytic veg	retation	and wetland hyd	rolog	v must he	nresen	t unless disturbe	•	
-	Layer (if observed)		and Welland Hyd	i olog	y iliust be	l presen	t, arriess distarbe	d of problematic.	
	=	•	None			Lludric	Cail Dracant?		Vos. / No.
	Type:	-	None			Hydric	Soil Present?		Yes No
	Depth (inches):	_							
Remarks: A positive in	ndication of hydric	soil was	s observed. The c	riterio	on for hyd	dric soil	is met.		





Photo of Sample Plot North



Photo of Sample Plot East



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	y Sampling Date: 2021-Sept-09			
Applicant/Owner: SunEast			State: NY	Sampling Point: W	/-JMP-18_UPL-1		
Investigator(s): Jerry Peake, Ca	arson Rowe, Abi Lig	ght	Section, Township,	Range: NA			
Landform (hillslope, terrace, etc.): Flat		Local relief (concave, conv	rex, none): None	Slope (%): 1 to 3		
Subregion (LRR or MLRA):	.RR L		Lat: 42.861243557	6 Long: -74.5136362935	Datum: WGS84		
Soil Map Unit Name: Churchy	ille silty clay loam,	ChB		NWI classifica	ation: None		
Are climatic/hydrologic condition	ns on the site typic	al for this time of ye	ar? Yes <u>✓</u> No	(If no, explain in Remark	ks.)		
Are Vegetation $\underline{\checkmark}$, Soil $\underline{\checkmark}$,	or Hydrology	significantly dis	sturbed? Are "Norm	al Circumstances" present?	Yes No _ _ /		
Are Vegetation, Soil,	or Hydrology _.	naturally probl	ematic? (If needed,	explain any answers in Rema	rks.)		
SUMMARY OF FINDINGS – A	Attach site map	showing samplir	ng point locations, trar	nsects, important feature	es, etc.		
Hydrophytic Vegetation Present	? Yes	No _ _ _					
Hydric Soil Present?		No	Is the Sampled Area with	in a Wetland?	Yes No/_		
			i '		163 140 <u></u>		
Wetland Hydrology Present?	· · · · · · · · · · · · · · · · · · ·	No	If yes, optional Wetland S	Site ID:			
Remarks: (Explain alternative pr	ocedures here or i	n a separate report)				
Covertype is UPL. Area is upland	not all three wet	land narameters are	nresent Circumstances a	re not normal due to agriculti	ural activities		
Covertype is OF L. Area is uplant	a, flot all tillee wet	ianu parameters are	e present. Circumstances a	ire not normal due to agricult	urar activities.		
İ							
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of	one is required; c	heck all that apply)		Secondary Indicators (minim	um of two required)		
Conform Mater (A1)		\\/	(DO)	Surface Soil Cracks (B6)			
Surface Water (A1)	_	_ Water-Stained Lea		Drainage Patterns (B10)			
High Water Table (A2)	_	_ Aquatic Fauna (B1		Moss Trim Lines (B16)			
Saturation (A3)		_ Marl Deposits (B1		Dry-Season Water Table (C2)			
Water Marks (B1)	_	_ Hydrogen Sulfide		Cravfish Burrows (C8)			
Sediment Deposits (B2)	_	•	neres on Living Roots (C3)) Craylish Burlows (Co) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)		_ Presence of Reduc	ced Iron (C4)	Saturation visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	_	_ Recent Iron Reduc	ction in Tilled Soils (C6)	Geomorphic Position (D2			
Iron Deposits (B5)	_	_ Thin Muck Surface	e (C7)		.)		
Inundation Visible on Aerial	lmagery (B7) _	_ Other (Explain in F	Remarks)	Shallow Aquitard (D3)	'D 4)		
Sparsely Vegetated Concave	Surface (B8)	,		Microtopographic Relief (D4)		
				FAC-Neutral Test (D5)			
Field Observations:							
Surface Water Present?	Yes No _	<u>✓</u> Depth	(inches):	_			
Water Table Present?	Yes No _	✓ Depth ((inches):	Wetland Hydrology Present?	Yes No		
Saturation Present?	Yes No	✓ Depth ((inches):				
(includes capillary fringe)			-	-			
					·		
Describe Recorded Data (stream	n gauge, monitorir	ig well, aerial photos	s, previous inspections), if a	available:			
Remarks:							
The criterion for wetland hydrol	ngy is not met. No	nositive indication	of wetland hydrology was i	observed			
The chemon for wedana nyaron	ogy is not met. No	positive indication	or wettaria riyar ology was	observed.			

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant		1	(4)
1.				Are OBL, FACW, or FAC	: :	1	(A)
2.				Total Number of Domi	inant Species		
3.				Across All Strata:	·	2	(B)
				Percent of Dominant S	Species That	F0	(A (D)
4				- Are OBL, FACW, or FAC	:	50	(A/B)
5				Prevalence Index work	sheet:	·	
6				- Total % Cover	<u>r of:</u>	Multiply	By:
7				- OBL species	20	x 1 =	20
	0	_= Total Cove	er	FACW species	10	x 2 =	20
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	60	x 3 =	180
1				- FACU species	0	x 4 =	0
2				- UPL species	60	x5=	300
3.				· ·		-	
4.				- Column Totals	150	(A)	520 (B)
5.				Prevalence I	ndex = B/A =	3.5	
6.				Hydrophytic Vegetatio	n Indicators:		
7.				1- Rapid Test for	Hydrophytic V	egetation/	1
·				2 - Dominance Te	est is > 50%		
	0	_= Total Cove	er	3 - Prevalence In	dex is $\leq 3.0^1$		
Herb Stratum (Plot size: 5 ft)				4 - Morphologica	l Adaptations ¹	(Provide	supporting
1. Zea mays	60	Yes	UPL	data in Remarks or on	a separate sh	eet)	
2. <i>Setaria pumila</i>	40	Yes	FAC	Problematic Hyd	rophytic Vege	tation¹ (Ex	kplain)
3. Echinochloa crus-galli	20	No	FAC	- Indicators of hydric so	oil and wetlan	d hydrolo	gy must be
4. Lythrum salicaria	20	No	OBL	present, unless distur		-	0,
5. Cyperus strigosus	10	No	FACW	Definitions of Vegetati	on Strata:		
6.				Tree – Woody plants 3		more in	diameter at
7.				breast height (DBH), re			aiaiiictei at
8.				Sapling/shrub - Wood	_	_	DBH and
9.				greater than or equal			
				Herb – All herbaceous			gardless of
10				size, and woody plants			0
11				Woody vines - All woo			.28 ft in
12		 -		height.	,		
	150	_= Total Cove	er		an Dracant? \	/os N	lo (
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	on Present?	res r	NO
1				_			
2				_			
3				_			
4.							
	0	= Total Cove	er	-			
		_					
Remarks: (Include photo numbers here or on a se	•						
Active agricultural field. No positive indication of	hydrophytic veg	etation was (observed (≥	≥50% of dominant speci	es indexed as	FAC- or c	lrier).

Depth Matrix Redox Features
10
8-15
Tight Tigh
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 2Location: PL = Pore Lining, M = Matrix.
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Histosol (A1)
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Thick Dark Surface (A12) — Sandy Mucky Mineral (S1) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below 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)
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Thick Dark Surface (A12) — Sandy Mucky Mineral (S1) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below 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)
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Thick Dark Surface (A12) — Sandy Mucky Mineral (S1) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below 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)
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Thick Dark Surface (A12) — Sandy Mucky Mineral (S1) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below 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)
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Thick Dark Surface (A12) — Sandy Mucky Mineral (S1) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below 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)
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Thick Dark Surface (A12) — Sandy Mucky Mineral (S1) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below 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)
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (IRR R, L) Redox Dark Surface (F1) Stripped Matrix (S6) Dark Surface (S7) (IRR R, L) Indicators for Problematic Hydric Soils³: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Dark Surface (S7) (LRR K, L) 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)
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (IRR R, L) Redox Dark Surface (F1) Stripped Matrix (S6) Dark Surface (S7) (IRR R, L) Indicators for Problematic Hydric Soils³: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Dark Surface (S7) (LRR K, L) 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)
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (IRR R, L) Redox Dark Surface (F1) Stripped Matrix (S6) Dark Surface (S7) (IRR R, L) Indicators for Problematic Hydric Soils³: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Dark Surface (S7) (LRR K, L) 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)
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) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) — Hydrogen Sulfide (A4) — Loamy Gleyed Matrix (F2) — Depleted Layers (A5) — Depleted Matrix (F3) — Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Piedmont Floodplain Soils (F19) (MLRA 149B) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR R, 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)
Histic Epipedon (A2)
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (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)
Black Histic (A3)Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
 Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Park Surface (S7) (LRR K, L) Iron-Manganese Masses (F12) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12)
Stratified Layers (A5) Depleted Matrix (F3) — Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) — Third Dark Surface (A12) Depleted Dark Surface (F7) — Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) — Stripped Matrix (S6) — Redox Depressions (F8) — Redox Depressions (F8) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) — Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)
Finick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12)
Sandy Mucky Mineral (S1)Redox Depressions (F8)Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12)
Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12)
Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12)
Stripped Matrix (S6) Very Shallow Dark Surface (TF12)
Dark Curface (C7) (LDD D. MLDA 140D)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed):
Type: None Hydric Soil Present? Yes No
Depth (inches):
Remarks:
A positive indication of hydric soil was observed. The criterion for hydric soil is met. Soil significantly disturbed as a result of tilling. Soil disturbed,
although not significantly enough to obscure hydric soil indicators, as a result of historical filling or grading.
authough not significantly enough to obscure flyune soil indicators, as a result of historical filling of grading.







Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgoe=mery	Sampling Date: 2021-Sept-13				
Applicant/Owner: SunEast		<u> </u>	State: N	Υ	Sampling Point: W-JM	IP-19_PFO-1		
Investigator(s): Jerry Peake, St	eve Spotts, Abi Lig	ht	Section, Townshi	p, Range: N	Α			
Landform (hillslope, terrace, etc.)): Valley		Local relief (concave, co	nvex, none):	Concave	Slope (%): 1 to 3		
Subregion (LRR or MLRA): L	.RR L	_	Lat: 42.84015031	123 Long:	-74.4919382712	Datum: WGS84		
Soil Map Unit Name: Lansing	silt loam, LaD				NWI classification	n: R2UB		
Are climatic/hydrologic condition	s on the site typica	al for this time of yea	ar? Yes <u>✓</u> N	lo (If no	o, explain in Remarks.)			
Are Vegetation, Soil,	or Hydrology ₋	significantly dis	turbed? Are "Nor	mal Circumst	tances" present?	Yes 🟒 No		
Are Vegetation, Soil,	or Hydrology ₋	naturally proble	ematic? (If neede	d, explain an	ny answers in Remarks.)		
SUMMARY OF FINDINGS – A	Attach site map	showing samplin	ng point locations, tra	ansects, im	ာportant features, မ	etc.		
Hydrophytic Vegetation Present	? Yes	✓_ No						
Hydric Soil Present?		✓ No	Is the Sampled Area wit	hin a Watlan	nd? Vas	No		
			•					
Wetland Hydrology Present?		✓ No	If yes, optional Wetland	Site ID:	VV-JN	ИР-19 —		
Remarks: (Explain alternative pr		•						
Covertype is PFO. Area is wetlan	d, all three wetlan	d parameters are pr	esent.					
HYDROLOGY								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of	one is required; c	heck all that apply)		Secondary	y Indicators (minimum	of two required)		
(Saufe as) N/ahan (A4)	·	Water Chaire all an	(DO)	Surfac	ce Soil Cracks (B6)	•		
✓ Surface Water (A1)	_	_ Water-Stained Lea		Draina	age Patterns (B10)			
High Water Table (A2) ∕ Saturation (A3)	_	_ Aquatic Fauna (B1: _ Marl Deposits (B15						
Water Marks (B1)	_	_ Hydrogen Sulfide (Dry-Season Water Table (C2)				
Sediment Deposits (B2)	_		eres on Living Roots (C3	1	sh Burrows (C8)			
Drift Deposits (B3)	_	_ Presence of Reduc	_	Satura	ation Visible on Aerial Ir	-		
Algal Mat or Crust (B4)	_		tion in Tilled Soils (C6)		ed or Stressed Plants (D	01)		
Iron Deposits (B5)		 ✓ Thin Muck Surface			orphic Position (D2)			
Inundation Visible on Aerial		_ _ Other (Explain in R			w Aquitard (D3)			
✓ Sparsely Vegetated Concave		- ' '	•		topographic Relief (D4)			
Field Observations				FAC-N	eutral Test (D5)			
Field Observations:	Van d Na	Danth	(in also a). 1					
Surface Water Present?	Yes _✓ No _		(inches): 1	-[
Water Table Present?	Yes No _	Depth ((inches): 0	Wetland F	Hydrology Present?	Yes No		
Saturation Present?	Yes No _	Depth ((inches): 0					
(includes capillary fringe)								
Describe Recorded Data (strean	n gauge, monitorin	ig well, aerial photos	, previous inspections), i	f available:				
Remarks:								
The criterion for wetland hydrol	ogy is met A nosit	ive indication of wet	land hydrology was obse	arved (nrima	ery and secondary indic	estore ware precent)		
The chieffor for wetland hydror	ogy is met. A posit	ive indication of wet	iana nyarology was obse	erveu (prima	ily and secondary maic	ators were present).		

	Dominant Species?	Indicator Status	Dominance Test worksh Number of Dominant Sp	F	(4)	
50	Yes	FACU	Are OBL, FACW, or FAC:			(A)
35	Yes	FACU	Total Number of Domina	ant Species	8	(B)
30	Yes	FACW	Across All Strata:			
20	No	FAC				(A/B)
10	No	FACW				
						-
145	= Total Cov	/er	_ · · · —		_	0
-	=				_	100
25	Yes	FAC	<u> </u>		_	195
. ——	$\overline{}$		· —		_	380
	$\overline{}$				x 5 =	0
	103	171011	Column Totals	210	(A)	675 (B)
			Prevalence Inc	dex = B/A =	3.2	
			Hydrophytic Vegetation	Indicators:		
. ——			1- Rapid Test for H	ydrophytic \	egetation/	
45	- Total Co		2 - Dominance Test			
45	_ 10tal Cov	/er	3 - Prevalence Inde	$x \text{ is } \leq 3.0^{1}$		
15	Voc	FAC.	4 - Morphological A	Adaptations	(Provide s	supporting
	$\overline{}$		data in Remarks or on a	separate sh	ieet)	
5	<u>Yes</u>	FAC	- Problematic Hydro	phytic Vege	tation¹ (Ex _l	plain)
. ——			Indicators of hydric soil	and wetlan	d hydrolog	gy must be
			present, unless disturbe	d or proble	matic	
			Definitions of Vegetation	n Strata:		
			Tree – Woody plants 3 in	ı. (7.6 cm) oı	more in d	liameter a
					_	
						BH and
			_			
			· ·			ardless of
				/ vines grea	ter than 3	28 ft in
20	= Total Cov	/er				
	=		Hydrophytic Vegetation	Present? \	∕es <u> </u>	0
			-			
			-			
			-			
	50 35 30 20 10 145 25 10 10 45 5	35	50 Yes FACU 35 Yes FACU 30 Yes FACW 20 No FAC 10 No FACW 145 = Total Cover 25 Yes FACU 10 Yes FACU 10 Yes FACU 5 Yes FAC 5 Yes FAC	Are OBL, FACW, or FAC: 35	50 Yes FACU 35 Yes FACW 30 Yes FACW 20 No FAC 10 No FACW 10 No FACW 145 = Total Cover Prevalence Index worksheet: Total % Cover of: 0BL species 0 FACW species 50 FAC species 65 FACU species 95 UPL species 0 Column Totals 210 Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation Indicators: 2- Dominance Test is >50% 3 - Prevalence Index is ≤ 3.0¹ 4 - Morphological Adaptations: data in Remarks or on a separate shrematic Hydrophytic Vegetation Indicators of hydric soil and wetlan present, unless disturbed or probletation of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or breast height (DBH), regardless of head the same of the same	So

	cription: (Describe t	to the de	•			ndicator	or confirm the al	osence of indicate	ors.)
Depth _	Matrix	06	Redox			1002	Toute		Domarks
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Textu		Remarks
0 - 20	10YR 2/1	100		. —			Silty Clay	/ Loam	
				_					
				_					
				_					
		· —		_					
				-					
				_					
1 Type: C = C	Concentration, D = I	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil	ndicators:							Indicators for P	roblematic Hydric Soils³:
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Sui	rface	(S9) (LRR	R, MLR	A 149B)		e Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Mucky	/ Mir	eral (F1)	(LRR K, L	.)		Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			-	e (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted Ma	trix (I	F3)				elow Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfa	ce (A11)	Redox Dark S	urfa	ce (F6)				urface (S9) (LRR K, L)
<u>✓</u> Thick Dark Surface (A12) Depleted Dark Surface (F7)									nese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Redox Depre	ssior	ns (F8)				
Sandy G	ileyed Matrix (S4)								loodplain Soils (F19) (MLRA 149B)
Sandy R	edox (S5)							•	ic (TA6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)							Red Parent	
	rface (S7) (LRR R, M	II RA 149)B)						w Dark Surface (TF12)
			,					Other (Expl	ain in Remarks)
3Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must be	e presen	t, unless disturbe	d or problematic	
Restrictive I	ayer (if observed):								
	Type:		None			Hydric	Soil Present?		Yes/_ No
	Depth (inches):			-		1			
Remarks:	Deptir (interies):	_				ı			
A positive in	ndication of hydric	soil was	observed. The cr	iterio	on for hyd	dric soil	is met.		

Hydrology Photos



Vegetation Photos

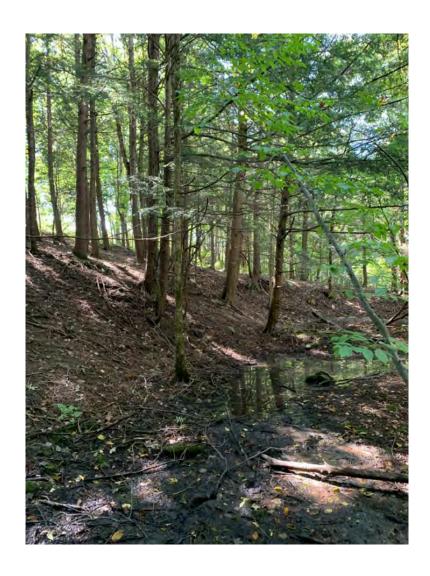






Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	ject	City/County:,			Sampling Date: 202	21-Sept-13		
Applicant/Owner: SunEast			State:	Sa	ampling Point: W-JM	P-19_UPL-1		
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Light		Section, Township,	Range: NA				
Landform (hillslope, terrace, etc.)	: Hillslope		Local relief (concave, conv	/ ex, none): _ S	Slope	Slope (%): 5 to 10		
Subregion (LRR or MLRA):	RR L		Lat: 42.840117629	7 Long: -	74.4919898158	Datum: WGS84		
Soil Map Unit Name: Lansing s	silt loam, LaD				NWI classification	n: None		
Are climatic/hydrologic condition	s on the site typical	for this time of ye	ear? Yes <u>✓</u> No	(If no, e	explain in Remarks.)			
Are Vegetation, Soil,	or Hydrology	significantly di	sturbed? Are "Norma	al Circumsta	nces" present?	Yes 🟒 No		
Are Vegetation, Soil,	or Hydrology	naturally prob	lematic? (If needed,	explain any	answers in Remarks.)		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative pro	? Yes Yes Yes ocedures here or in a	No ✓ No ✓ No ✓ a separate report	Is the Sampled Area withi If yes, optional Wetland Si	in a Wetland?		etc.		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of	·		2002 (DO)	-	Indicators (minimum Soil Cracks (B6)	of two required)		
Surface Water (A1) High Water Table (A2)		Water-Stained Le Aquatic Fauna (B´		Drainage	e Patterns (B10)			
Saturation (A3)		Aqualic Fauria (B Marl Deposits (B1		Moss Trim Lines (B16)				
Water Marks (B1)		Hydrogen Sulfide		-	son Water Table (C2)			
Sediment Deposits (B2)			heres on Living Roots (C3)	-	Burrows (C8)			
Drift Deposits (B3)		Presence of Redu	•		on Visible on Aerial II	•		
Algal Mat or Crust (B4)			ction in Tilled Soils (C6)		or Stressed Plants (E	01)		
Iron Deposits (B5)		Thin Muck Surfac			phic Position (D2)			
Inundation Visible on Aerial I	magery (B7) (Other (Explain in	Remarks)		Aquitard (D3)			
Sparsely Vegetated Concave					pographic Relief (D4) utral Test (D5)			
Field Observations:					aciai iest (D5)			
Surface Water Present?	Yes No	✓ Denth	(inches):					
Water Table Present?	Yes No _ ∠	•	· · · · · · · · · · · · · · · · · · ·	- Wotland Hy	drology Present?	Yes No		
			(inches):	- welland ny	drology Present?	165 NO _ _ Z		
Saturation Present?	Yes No _ ∠	<u>Z</u> Depth	(inches):	-				
(includes capillary fringe)						· · · · · · · · · · · · · · · · · · ·		
Describe Recorded Data (stream Remarks:			s, previous inspections), if a					

80 15 15	Yes No No	FACU FACU FACU	Number of Dominant S Are OBL, FACW, or FAC Total Number of Domi Across All Strata: Percent of Dominant S	: nant Species	2	(A) (B)
15	No	FACU	Total Number of Domi Across All Strata: Percent of Dominant S	nant Species		(B)
			Across All Strata: Percent of Dominant S			(B)
15	No	FACU	Percent of Dominant S	pecies That		
			 Are OBL, FACW, or FAC 	:	0	(A/B)
			Prevalence Index work			
			- <u>Total % Cover</u>	of:	Multiply	By:
				0	x 1 =	0
110	= Total Cov	er	FACW species	0	x 2 =	0
			- I	0	-	0
15	Yes	FACU	· -		-	500
			<u> </u>		-	0
			-		-	500 (B)
			-		-	300 (b)
			-		4	
			•		'egetatior	l
15	= Total Cov	er				
	-					
						supporting
_				•		
				, , ,	-	
			,		-	gy must be
					matic	
			_			
			-			diameter at
			-	_	_	
						OBH and
						gardiess of
						20 ft in
			=	ay viries great	er man 5	.20 11 111
0	= Total Cov	er				
			Hydrophytic Vegetatio	n Present? \	′es N	lo <u>√</u>
			_			
			=			
			=			
0	= Total Cov	er	-			
	15	15 Yes	15 = Total Cover 0 = Total Cover	15 Yes FACU FACU species FACU species UPL species Column Totals Prevalence In Hydrophytic Vegetation 1- Rapid Test for It 2 - Dominance Te 3 - Prevalence Inc 4 - Morphological data in Remarks or on Problematic Hydr Indicators of hydric so present, unless disturb Definitions of Vegetation Tree - Woody plants 3 breast height (DBH), re Sapling/shrub - Woody greater than or equal t Herb - All herbaceous size, and woody plants Woody vines - All wood height. Hydrophytic Vegetation	Total Cover 15 Yes FACU FACU FACU species 0	Total Cover 15

	cription: (Describe	to the d	•			indicato	r or confirm the ab	sence of indicate	ors.)
Depth	Matrix		Redox						
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks
0 - 5	10YR 3/3	100		_			Silt Loam		
5 - 20	10YR 3/4	100		_			Silt Loam		
				_					
				_					
				_					
				_					
	-			_					
				_					_
				_					
	-			_					
1T	Samuel D	D l . ti	- DM Deduced	<u> </u>		N 4 l	Court Courter 21 -	DI D	a Limite a NA - NA shelis
	Concentration, D =	Depletio	on, RM = Reduced	Mati	1X, MS =	Masked	Sand Grains. ² Lo		e Lining, M = Matrix.
Hydric Soil				_				Indicators for P	roblematic Hydric Soils³:
Histoso			Polyvalue Bel				•	2 cm Muck ((A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Sui					Coast Prairi	e Redox (A16) (LRR K, L, R)
	istic (A3)		Loamy Mucky			(LRR K, I	_)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surfac	e (S7) (LRR K, L)
	ed Layers (A5) ed Below Dark Surfa	aca (A11	Depleted Mat		•			Polyvalue B	elow Surface (S8) (LRR K, L)
	ark Surface (A12)	ace (ATI	Depleted Dar		` '			Thin Dark S	urface (S9) (LRR K, L)
	Mucky Mineral (S1)		Redox Depre			,		Iron-Manga	nese Masses (F12) (LRR K, L, R)
	•		Redox Depile	55101	IS (FO)			Piedmont F	loodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spod	ic (TA6) (MLRA 144A, 145, 149B)
-	Redox (S5)							Red Parent	Material (F21)
	d Matrix (S6)							Very Shallov	w Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, N	/ILRA 14	9B)					Other (Expla	ain in Remarks)
	of hydrophytic veg		and wetland hydr	olog	y must b	e preser	nt, unless disturbed	d or problematic	
Restrictive	Layer (if observed):	:							
	Type:		None			Hydric	Soil Present?	Yes	No / _
	Depth (inches):								
Remarks:									
No positive	indication of hydri	IC SOIIS V	vas observed. The	Crite	erion for	nyaric s	on is not met.		
l									
l									

Vegetation Photos



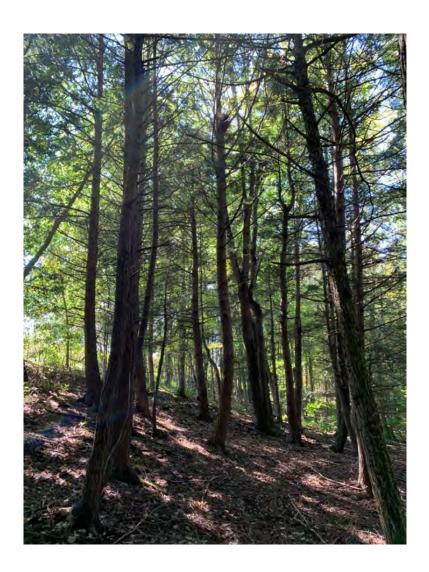




Photo of Sample Plot North

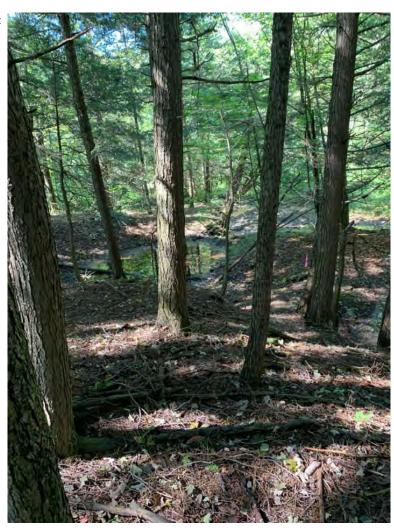


Photo of Sample Plot South



Photo of Sample Plot West



Applicant/Owner: SunEast	City/County: Spr	akers, Montgomery County	Sampling Date: 2021	-Sept-13	
		State: NY	Sampling Point: W-JMP-20_PEM-1		
Investigator(s): Jerry Peake, Steve Spott	s, Abi Light	Section, Township, Range:	NA		
Landform (hillslope, terrace, etc.): De	epression	Local relief (concave, convex, none	: Concave	Slope (%): 1 to 3	
Subregion (LRR or MLRA): LRR L		Lat: 42.8411358206 Long	g: -74.4918361899	Datum: WGS84	
Soil Map Unit Name: Churchville silty c	lay loam, ChB		NWI classification:	None	
Are climatic/hydrologic conditions on the	site typical for this time of y	ear? Yes _✓_ No (If r	no, explain in Remarks.)		
Are Vegetation <u></u> , Soil <u>,</u> , or H	ydrology significantly d	isturbed? Are "Normal Circum	stances" present? Ye	es No	
Are Vegetation, Soil, or Hy	ydrology naturally prob	olematic? (If needed, explain a	any answers in Remarks.)		
SUMMARY OF FINDINGS – Attach s	ite map showing sampl	ing point locations, transects, i	mportant features, et	c.	
Hydrophytic Vegetation Present?	Yes _ ✓ _ No	1			
Hydric Soil Present?	Yes _ ✓ _ No	Is the Sampled Area within a Wetla	ind? Vac	<u>∕_</u> No	
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site ID:	W-JMF	P-20	
Remarks: (Explain alternative procedures	here or in a separate repor	t)			
Covertype is PEM. Area is wetland, all thr	ee wetland parameters are	present. Circumstances are not norn	nal due to mowing of vege	etation.	
HYDROLOGY					
Watland Hydrology Indicators					
Wetland Hydrology Indicators:	aguired: check all that apply)	Soconda	un Indicators (minimum o	f two required)	
Primary Indicators (minimum of one is re	<u>:quired; cneck all that apply)</u>		iry Indicators (minimum o	i two requirea)	
∕ Surface Water (A1)	Water-Stained Le	aves (R9)	ace Soil Cracks (B6)		
<u>✓</u> High Water Table (A2)	Aquatic Fauna (B	13)	nage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B	15)	S Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide	()dor((1)	Season Water Table (C2) fish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosp	nheres on Living Roofs (C3)	ration Visible on Aerial Im		
	Presence of Redu	iced Iron (C4)	ted or Stressed Plants (D1	24051 (CO)	
Drift Deposits (B3)		Sturi			
Drift Deposits (B3) Algal Mat or Crust (B4)		iction in Tilled Soils (C6)			
		iction in Tilled Soils (C6) -e (C7) Geor	morphic Position (D2)		
Algal Mat or Crust (B4)	Recent Iron Redu Thin Muck Surfac	iction in Tilled Soils (C6) ice (C7) Remarks) — Shall	norphic Position (D2) ow Aquitard (D3)		
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Redu Thin Muck Surfac (B7) Other (Explain in	retion in Tilled Soils (C6) re (C7) Remarks) Shall Micro	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4)		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface	Recent Iron Redu Thin Muck Surfac (B7) Other (Explain in	retion in Tilled Soils (C6) re (C7) Remarks) Shall Micro	norphic Position (D2) ow Aquitard (D3)		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Field Observations:	Recent Iron Redu Thin Muck Surfac (B7) Other (Explain in (B8)	re (C7) Remarks) — Geor — Shall — Micro — FAC-	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4)		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8)	re (C7) Remarks)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5)		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes _ Water Table Present? Yes _	Recent Iron Redu Thin Muck Surfac (B7) Other (Explain in (B8) No Depth No Depth	retion in Tilled Soils (C6) re (C7) Remarks) Micro FAC- In (inches): 1 (inches): 1 (wetland)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4)		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (See Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes See	— Recent Iron Redu — Thin Muck Surfac (B7) — Other (Explain in (B8) ✓ No — Depth	re (C7) Remarks)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5)		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes _ Water Table Present? Yes _	Recent Iron Redu Thin Muck Surfac (B7) Other (Explain in (B8) No Depth No Depth	retion in Tilled Soils (C6) re (C7) Remarks) Micro FAC- In (inches): 1 (inches): 1 (wetland)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5)		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Incomplete	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth	re (C7) Remarks)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes _ Water Table Present? Yes _ Saturation Present? Yes _ (includes capillary fringe)	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth	re (C7) Remarks)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes _ Water Table Present? Yes _ Saturation Present? Yes _ (includes capillary fringe)	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth	re (C7) Remarks)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth	re (C7) Remarks)	norphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?		
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth	re (C7) Remarks)	morphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?	Yes No	
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth	re (C7) Remarks)	morphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?	Yes No	
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth	re (C7) Remarks)	morphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?	Yes No	
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth	re (C7) Remarks)	morphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?	Yes No	
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth	re (C7) Remarks)	morphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?	Yes No	
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth	re (C7) Remarks)	morphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?	Yes No	
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface (Sparsely Vegetated Concave Surface (Surface Water Present?	Recent Iron Redu Thin Muck Surface (B7) Other (Explain in (B8) No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth No Depth	re (C7) Remarks)	morphic Position (D2) ow Aquitard (D3) otopographic Relief (D4) Neutral Test (D5) I Hydrology Present?	Yes No	

Tree Stratum (Plot size:30 ft)		Dominant Species?	Indicator Status	Dominance Test work Number of Dominan Are OBL, FACW, or FA	t Species That	3	(A)
1				Total Number of Don Across All Strata:		3	(B)
5				Percent of Dominant Are OBL, FACW, or FA	•	100	(A/B)
6.				Prevalence Index wo	rksheet:		
· ————————————————————————————————————				Total % Cov	<u>er of:</u>	<u>Multiply</u>	By:
7				OBL species	20	x 1 =	20
	0	= Total Cov	er	FACW species	95	x 2 =	190
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	40	x 3 =	120
1. Cornus amomum	15	Yes	FACW	FACU species	10	x 4 =	40
2				UPL species	0	x 5 =	0
3				Column Totals	165	(A)	370 (B)
4					Index = B/A =	2.2	370 (b)
5.				-			
6.				Hydrophytic Vegetati			
7.				1- Rapid Test fo		egetation/	1
· ·	 15	= Total Cov	er	2 - Dominance			
Herb Stratum (Plot size: <u>5 ft</u>)		-	·.	3 - Prevalence I	ndex is $\leq 3.0^1$		
1. Symphyotrichum lanceolatum	80	Yes	FACW	4 - Morphologic	al Adaptations	¹ (Provide	supporting
	40	Yes		data in Remarks or o	n a separate sh	neet)	
2. Euthamia graminifolia			FAC	Problematic Hy	drophytic Vege	tation¹ (Ex	kplain)
3. Alisma plantago-aquatica	20	No	OBL	¹ Indicators of hydric	soil and wetlan	d hydrolo	gy must be
4. <i>Galium mollugo</i>		No	FACU	present, unless distu	rbed or proble	matic	
5				Definitions of Vegeta	tion Strata:		
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 - Woo	dy plants less t	han 3 in. [DBH and
9.				greater than or equa	I to 3.28 ft (1 m) tall.	
10				Herb – All herbaceou	ıs (non-woody)	plants, re	gardless of
11.				size, and woody plan	ts less than 3.2	8 ft tall.	
12.				Woody vines – All wo	ody vines grea	ter than 3	.28 ft in
·	150	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)	130 10101 60461			Hydrophytic Vegetat	tion Present? `	res _ ∠ _ N	No
1.							
<u> </u>							
3							
4							
	0	= Total Cov	er				

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

	•	to the	•			indicato	r or confirm the al	bsence of indicators.)
Depth _	Matrix				tures			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc2	Texture	
0 - 12	10YR 3/1	97	5YR 4/6	3	C	M/PL	Clay Loar	
12 - 20	10YR 3/2	95	7.5YR 4/6	5	C	M	Clay Loar	m
-								
-								
		_		_				
_				_				
				_				
				_				
1T			ion DM - Doduce		tuit MC	- Maaliad	Cond Cusins 21	anations DL — David Liming M — Matrix
	oncentration, D =	Deplet	ion, Rivi = Reduce	u IVI	itrix, IVIS	= Masked	Sand Grains. ² Li	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil I								Indicators for Problematic Hydric Soils ³ :
Histosol							R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark S					Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi			Loamy Muc	-			L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gley)		Dark Surface (S7) (LRR K, L)
	d Layers (A5) d Below Dark Surfa	aca (A1	Depleted M					Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)	ace (A i	Depleted D			7)		Thin Dark Surface (S9) (LRR K, L)
	lucky Mineral (S1)		Redox Depr			<i>'</i>)		Iron-Manganese Masses (F12) (LRR K, L, R)
			Redox Depi	CSSIC	113 (10)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	lleyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_	edox (S5)							Red Parent Material (F21)
	l Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	/ILRA 1	49B)					Other (Explain in Remarks)
3Indicators	of hydrophytic veg	etation	n and wetland hyd	drolo	gy must	be preser	nt, unless disturbe	ed or problematic.
Restrictive L	ayer (if observed):							
	Type:		None			Hydric 9	Soil Present?	Yes No
	Depth (inches):							
Remarks:								·
	ndication of hydric	soil wa	as observed. The	criter	ion for h	ydric soil	is met.	

Hydrology Photos



Vegetation Photos



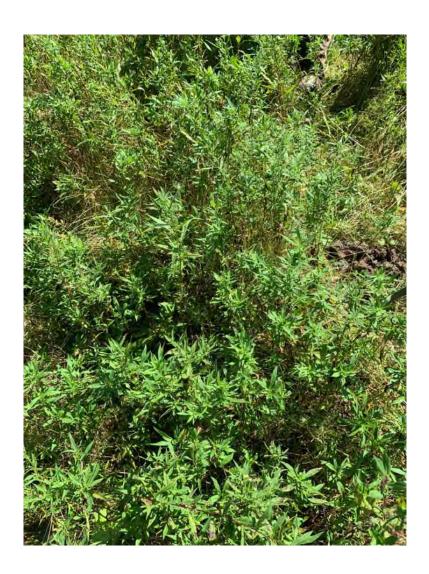




Photo of Sample Plot East



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	akers, Montgomery	Sampling Date: 2021-Sept-13			
Applicant/Owner: SunEast		<u> </u>	State: NY		Sampling Point: W-JM	IP-20_PSS-1	
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Lig	ht	Section, Township,	Range: NA	4		
Landform (hillslope, terrace, etc.)	: Flat		Local relief (concave, conv	/ex, none):	Concave	Slope (%): 2 to 5	
Subregion (LRR or MLRA):	RR L	-	Lat: 42.841302799	2 Long:	-74.4918426364	Datum: WGS84	
Soil Map Unit Name: Churchvi	lle silty clay loam,	ChB			NWI classification	n: None	
Are climatic/hydrologic condition	s on the site typic	al for this time of ye	ar? Yes _✓_ No	(If no	, explain in Remarks.)		
Are Vegetation, Soil,	or Hydrology	significantly dis	sturbed? Are "Norm	al Circumst	ances" present?	Yes No	
Are Vegetation, Soil,	or Hydrology	naturally probl	ematic? (If needed,	explain any	y answers in Remarks.	.)	
SUMMARY OF FINDINGS – A	Attach site map	showing sampli	ng point locations, trai	nsects, im	portant features,	etc.	
Hydrophytic Vegetation Present	? Yes	✓ No					
Hydric Soil Present?	Yes	✓_ No	Is the Sampled Area with	in a Wetland	d? Yes	No	
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland S	ite ID:	W-IN	MP-20	
			L	itte ib.	44-71	VII -20	
Remarks: (Explain alternative pr							
Covertype is PSS. Area is wetland	d, all three wetlan	d parameters are pr	esent.				
LIVEROLOGY							
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of	ono is roquirod: (hock all that apply		Socondan	Indicators (minimum	of two required)	
Primary indicators (minimum or	one is required, c	леск ан итас арргут		-		or two required)	
Surface Water (A1)	_	Water-Stained Lea	aves (B9)		e Soil Cracks (B6)		
∕ High Water Table (A2)	_	Aquatic Fauna (B1	3)		ge Patterns (B10)		
✓ Saturation (A3)	_	Marl Deposits (B1			rim Lines (B16)		
Water Marks (B1)	_	Hydrogen Sulfide		-	ason Water Table (C2)		
Sediment Deposits (B2)	_		neres on Living Roots (C3)	-	h Burrows (C8)		
Drift Deposits (B3)	_	Presence of Redu	_	Saturat	tion Visible on Aerial Ir	magery (C9)	
Algal Mat or Crust (B4)	_		ction in Tilled Soils (C6)	Stunte	d or Stressed Plants (E	01)	
Iron Deposits (B5)	_	Thin Muck Surface		∕ Geomo	orphic Position (D2)		
Inundation Visible on Aerial I		Other (Explain in F		Shallov	w Aquitard (D3)		
		_ Other (Explain in i	Remarks)	Microto	opographic Relief (D4)		
Sparsely Vegetated Concave	Surface (B8)				eutral Test (D5)		
Field Observations:							
Surface Water Present?	Yes No _	<u>✓</u> Depth	(inches):	_			
Water Table Present?	Yes 🟒 No _	Depth	(inches): 3	Wetland H	lydrology Present?	Yes No	
Saturation Present?	Yes 🟒 No _	Depth	(inches): 0	_			
(includes capillary fringe)							
Describe Recorded Data (stream	gauge, monitorir	ng well, aerial photo	s, previous inspections), if	available:			
Beseribe Recorded Bata (stream	, gaage, monitorii	16 Well, derial prioto.	s, previous inspections,, in	avanabic.			
Remarks:							
The criterion for wetland hydrol	ogy is met A nosi	tive indication of we	tland hydrology was obser	wed (nrima	ry and secondary indic	cators were present)	
The criterion for wetland hydron	ogy is met. A posit	live indication of we	uanu nyurology was obser	veu (primai	ry and secondary muc	.ators were present).	

ree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That		
. Quercus rubra	40	Yes	FACU	Are OBL, FACW, or FAC:	4	(A)
. Fraxinus americana	25	Yes	FACU	Total Number of Dominant Species	8	(B)
. Acer saccharum	20	Yes	FACU	Across All Strata:		
. Malus sp.	10	No	NI	Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)
				Prevalence Index worksheet:		
				Total % Cover of:	Multiply	By:
				- OBL species 5	x 1 =	5
	95	_= Total Cov	ver .	FACW species 150	x 2 =	300
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 70	x 3 =	210
. Cornus amomum	60	Yes	FACW	FACU species 135	x 4 =	540
Rhamnus cathartica	30	Yes	FAC	UPL species 0	x 5 =	0
. Salix alba	15	No	FACW	Column Totals 360	(A)	1055 (B)
. Lonicera morrowii	10	No	FACU	Prevalence Index = B/A =	2.9	
				Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetation	
		= Total Cov		2 - Dominance Test is > 50%		
laub Chushi um (Dlat sina) - E.ft - \	115	_= TOTAL COV	er er	\checkmark 3 - Prevalence Index is \le 3.01		
lerb Stratum (Plot size:5 ft)	40	Voc	EACH	4 - Morphological Adaptations	¹ (Provide	supporting
. Solidago canadensis . Onoclea sensibilis	40	Yes	FACU	data in Remarks or on a separate sh	neet)	
		Yes	FACW	Problematic Hydrophytic Vege		
Euthamia graminifolia	25	No No	FAC	¹ Indicators of hydric soil and wetlan	,	gy must be
. Impatiens capensis		No No	FACW	present, unless disturbed or proble	matic	
. Symphyotrichum novae-angliae	15	No No	FACW	Definitions of Vegetation Strata:		
. Symphyotrichum puniceum	5	<u>No</u>	OBL	Tree - Woody plants 3 in. (7.6 cm) o		diameter a
·				breast height (DBH), regardless of h Sapling/shrub – Woody plants less t		NRH and
·				greater than or equal to 3.28 ft (1 m		Di i anu
				Herb – All herbaceous (non-woody)		gardless of
0				size, and woody plants less than 3.2		5
1				Woody vines – All woody vines grea		.28 ft in
2	1/5	= Total Cov	·or	height.		
	143	10tal Cov	rei	Hydrophytic Vegetation Present?	Yes N	lo
Voody Vine Stratum (Plot size: 30 ft)		Yes	FAC			
Voody Vine Stratum (Plot size: <u>30 ft</u>) . Vitis riparia	15			=		
. Vitis riparia	15					
. Vitis riparia	15					
. Vitis riparia 	15			-		
. Vitis riparia	15	= Total Cov	/er	-		

	scription: (Describe	to the d				ndicator	or confirm the a	bsence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%_	Color (moist)	%	Type ¹	Loc ²	Text	ure	Remarks
0 - 5	10YR 3/1	100					Silty Cla	y Loam	
5 - 13	10YR 3/2	95	5YR 3/4	5	C	M	Silty Cla	y Loam	
13 - 20	10YR 4/2	85	2.5YR 4/8	10	C	M	Silty Cla	y Loam	
13 - 20			2.5YR 3/6	5	С	M	Silty Cla	y Loam	
	-								
								_	
								-	
¹Type: C =	Concentration, D =	Depleti	on, RM = Reduced	Matı	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soi	Indicators:							Indicators for Pi	roblematic Hydric Soils³:
Histoso	ol (A1)		Polyvalue Be	low S	urface (S	8) (LRR F	R, MLRA 149B)		(A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Su				•		
	listic (A3)		Loamy Muck						e Redox (A16) (LRR K, L, R)
	gen Sulfide (A4)		Loamy Gleye	-		. ,	•		Peat or Peat (S3) (LRR K, L, R)
	ed Layers (A5)		Depleted Ma					Dark Surface	
Deplet	ed Below Dark Surf	ace (A1							elow Surface (S8) (LRR K, L)
Thick D	ark Surface (A12)		Depleted Da	rk Sui	face (F7)				urface (S9) (LRR K, L)
Sandy	Mucky Mineral (S1)		Redox Depre	ssion	ıs (F8)			_	nese Masses (F12) (LRR K, L, R)
Sandy	Gleyed Matrix (S4)								oodplain Soils (F19) (MLRA 149B)
-	Redox (S5)								c (TA6) (MLRA 144A, 145, 149B)
-	ed Matrix (S6)							Red Parent I	
	urface (S7) (LRR R, N	MI DA 1/	IOR)						v Dark Surface (TF12)
Dark 3	arrace (37) (ERR R, 1	VILIO (I-	,,					Other (Expla	ain in Remarks)
	of hydrophytic veg		and wetland hyd	rology	y must be	presen	t, unless disturbe	ed or problematic.	
Restrictive	Layer (if observed)	:							
	Type:		None			Hydric	Soil Present?		Yes/_ No
	Depth (inches):								
Remarks:									
A positive	indication of hydric	soil wa	s observed. The c	riteric	on for hyd	dric soil i	s met.		

Vegetation Photos







Photo of Sample Plot East



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pr	oject	City/County: Spra	kers, Montgomery	Sampling Date: 2021-Sept-13		
Applicant/Owner: SunEast			State: NY	Samp	pling Point: W-JMP-	-20_UPL-1
Investigator(s): Jerry Peake, St	eve Spotts, Abi Ligh	nt	Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.): Flat		Local relief (concave, conv	ex, none): Con	vex	Slope (%): 1 to 3
Subregion (LRR or MLRA):	LRR L		Lat: 42.841210215	5 Long: -74.4	4916981408 [Datum: WGS84
Soil Map Unit Name: Churchy	ille silty clay loam,	ChB			NWI classification:	None
Are climatic/hydrologic condition	າs on the site typica	al for this time of yea	ar? Yes <u>✓</u> No	(If no, exp	lain in Remarks.)	
Are Vegetation $\underline{\checkmark}$, Soil $\underline{\checkmark}$,	or Hydrology ₋	significantly dis	sturbed? Are "Norm	al Circumstance	s" present? Ye	es No _ _ /
Are Vegetation, Soil,	or Hydrology ₋	naturally probl	ematic? (If needed,	explain any ans	wers in Remarks.)	
SUMMARY OF FINDINGS –	Attach site map	showing samplir	ng point locations, trai	nsects, impor	tant features, et	c.
Hydrophytic Vegetation Present		No	<u> </u>	•		
, , ,			la tha Camania d Amaa with	: \A/-+ 7	Vaa	No. 4
Hydric Soil Present?		_ ✓ _ No	Is the Sampled Area with	in a wetiand?	Yes _	No <u></u> /_
Wetland Hydrology Present?	Yes _	No _ _ _	If yes, optional Wetland S	Site ID:		
Remarks: (Explain alternative p	ocedures here or i	n a separate report)				
Covertype is UPL. Area is upland	d, not all three wetl	land parameters are	present. Circumstances a	re not normal d	ue to mowing of ve	egetation.
Circumstances are not normal of	due to agricultural	activities.			•	
	ac to agricultar art	activities.				
HADBOI OCA						
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum o	f one is required; c	heck all that apply)		Secondary Indi	icators (minimum o	f two required)
	•			-	l Cracks (B6)	•
Surface Water (A1)	_	_ Water-Stained Lea		Drainage Pa		
High Water Table (A2)	_	_ Aquatic Fauna (B1		Moss Trim I		
Saturation (A3)		_ Marl Deposits (B1			Water Table (C2)	
Water Marks (B1)	_	_ Hydrogen Sulfide		Crayfish Bu		
Sediment Deposits (B2)	_	•	neres on Living Roots (C3)		Visible on Aerial Im	agery (C9)
Drift Deposits (B3)	_	_ Presence of Reduc			Stressed Plants (D1	-
Algal Mat or Crust (B4)	_		tion in Tilled Soils (C6)		ic Position (D2)	,
Iron Deposits (B5)	_	_ Thin Muck Surface		Shallow Aq		
Inundation Visible on Aerial	Imagery (B7) _	_ Other (Explain in F	Remarks)		graphic Relief (D4)	
Sparsely Vegetated Concave	Surface (B8)			FAC-Neutra		
Field Observations:				rac-neutra	i lest (D3)	
	Vos No	/ Donth /	(inches).			
Surface Water Present?	Yes No _		(inches):	-		
Water Table Present?	Yes No _	<u>✓</u> Depth ((inches):	Wetland Hydro	ology Present?	Yes No _ ✓
Saturation Present?	Yes No _	✓ Depth ((inches):			
(includes capillary fringe)				-		
Describe Recorded Data (stream	n gauge monitorin	g well periol photos	nravious inspactions) if	available.		
Describe Necorded Data (stream	ii gauge, monitorin	ig weil, aeriai priotos	s, previous irispections), ir	available.		
Remarks:						
The criterion for wetland hydro	logy is not met. No	nositive indication	of wetland hydrology was	nhsarvad		
The criterion for Wetland Hydro	logy is flot filet. No	positive indication (or wedana nyarology was	bbserved.		

·				.		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That	0	(A)
1				Are OBL, FACW, or FAC:		
2				Total Number of Dominant Species Across All Strata:	2	(B)
3						
4				Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)
5.					-	
6.				Prevalence Index worksheet:	N.A. alasimala a	D
7.				Total % Cover of:	<u>Multiply</u>	•
	0	= Total Cov	er	OBL species 0	x 1 =	0
Sapling/Shrub Stratum (Plot size:15 ft)	-	-		FACW species 0	x 2 =	0
				FAC species 0	x 3 =	0
				FACU species 130	x 4 =	520
3.				UPL species 0	x 5 =	0
				Column Totals 130	(A)	520 (B)
4				Prevalence Index = B/A =	4	
5				Hydrophytic Vegetation Indicators:		
6				1- Rapid Test for Hydrophytic \	Vegetation	า
7				2 - Dominance Test is > 50%	.0	
	0	= Total Cov	er	3 - Prevalence Index is ≤ 3.0¹		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptations	1 (Provide	sunnorting
1. <i>Taraxacum officinale</i>	50	Yes	FACU	data in Remarks or on a separate sh		supporting
2. Galium mollugo	30	Yes	FACU	- Problematic Hydrophytic Vege		xplain)
3. <i>Trifolium pratense</i>	20	No	FACU	¹Indicators of hydric soil and wetlan		•
4. Dactylis glomerata	20	No	FACU	present, unless disturbed or proble	-	8,
5. Trifolium repens	10	No	FACU	Definitions of Vegetation Strata:		
6.				Tree – Woody plants 3 in. (7.6 cm) o	r more in	diameter at
7.				breast height (DBH), regardless of h		didifficter de
8.				Sapling/shrub – Woody plants less t	_	DBH and
9.				greater than or equal to 3.28 ft (1 m		22
10				Herb – All herbaceous (non-woody)		gardless of
				size, and woody plants less than 3.2		0
11.				Woody vines – All woody vines grea		3.28 ft in
12				height.		
	130	= Total Cov	er	Hydrophytic Vegetation Present?	Voc 1	No. /
Woody Vine Stratum (Plot size: 30 ft)				Trydrophytic vegetation Fresent:	163 1	VO
1				-		
2.				-		
3				_		
4						
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a sepa	rate cheet)	=		_		
·		- l / -	- FOO/ - F - I - II	in-out on a size in-devel as FAC and di	:	
Fallow field. No positive indication of hydrophytic ve	getation was	observed (2	≥50% of dor	minant species indexed as FAC+ or dri	er).	

	scription: (Describe	to the o				indicato	r or confirm the a	absence of in	ndicators.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%_	Color (moist)	%	Type ¹	Loc ²	Texture	<u>e</u>	Remarks
0 - 8	10YR 3/2	100					Clay Loa	im	
8 - 20	10YR 4/2	75	7.5YR 4/6	25	С	M	Clay Loa	im	
								,	
				_					
				_					
	-			—					
				_					
				_					
¹Type: C =	Concentration, D =	Depleti	on, RM = Reduced	l Mat	rix, MS =	Masked	Sand Grains. ² L	Location: PL	= Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators	s for Problematic Hydric Soils³:
Histoso	ol (A1)		Polyvalue Be	low S	urface (S	8) (LRR	R, MLRA 149B)	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	rface	(S9) (LRF	R, MLR	A 149B)		Prairie Redox (A16) (LRR K, L, R)
Black F	listic (A3)		Loamy Muck	y Mir	eral (F1)	(LRR K, I	_)		Mucky Peat or Peat (S3) (LRR K, L, R)
	gen Sulfide (A4)		Loamy Gleye						Surface (S7) (LRR K, L)
	ed Layers (A5)		_ ✓ Depleted Ma						alue Below Surface (S8) (LRR K, L)
	ed Below Dark Surf	ace (A1							Park Surface (S9) (LRR K, L)
	Park Surface (A12)		Depleted Da)			Manganese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)				nont Floodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic	Spodic (TA6) (MLRA 144A, 145, 149B)
-	Redox (S5)								arent Material (F21)
Strippe	ed Matrix (S6)								hallow Dark Surface (TF12)
Dark Si	urface (S7) (LRR R, I	MLRA 14	19B)					-	(Explain in Remarks)
3Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe		
	Layer (if observed)		<u> </u>	0	,				
	Type:	,-	None			Hydric	Soil Present?		Yes No
	Depth (inches):		110110			i iyanc	John Tresent.		163 <u> </u>
Dama aulum	Deptil (iliciles).								
Remarks:		11	l Th		6	allast a la la still	: .		
A positive	indication of hydric	soll wa	s observed. The c	riterio	on for ny	dric soil	is met.		
1									
]									
1									
]									
<u> </u>									

Vegetation Photos





Photo of Sample Plot North



Photo of Sample Plot East



Project/Site: Flat Creek Solar Pr	oject	City/County: Spra	kers, Montgomery County	У	Sampling Date: 202	21-Sept-14
Applicant/Owner: SunEast			State: NY	<u> </u>	Sampling Point: W-JM	IP-21_PFO-1
Investigator(s): Jerry Peake, St	eve Spotts, Abi Light		Section, Township	, Range: NA	١	
Landform (hillslope, terrace, etc.	.): Terrace		Local relief (concave, con	vex, none):_	Concave	Slope (%): 2 to 5
Subregion (LRR or MLRA):	LRR L		Lat: 42.841783898	32 Long:	-74.4980779507	Datum: WGS84
Soil Map Unit Name: Lansing	silt loam, LaD				NWI classification	n: None
Are climatic/hydrologic condition	ns on the site typical	for this time of yea	ar? Yes 🟒 No	o (If no,	, explain in Remarks.)	
Are Vegetation, Soil,		significantly dis		nal Circumsta	ances" present?	Yes 🟒 No
Are Vegetation, Soil,	or Hydrology	naturally proble	ematic? (If needed	, explain any	y answers in Remarks.)
SUMMARY OF FINDINGS –	Attach site map sl	howing samplin	ng point locations, tra	nsects, im	portant features, e	etc.
Hydrophytic Vegetation Present	+2 Vas /	No			<u>- </u>	
Hydric Soil Present?			Is the Sampled Area with	in a Wotland	do Voc	/ No
•			•			No
Wetland Hydrology Present?	Yes	<u> No</u>	If yes, optional Wetland S	Site ID:	W-JN	MP-21
Wetland Hydrology Indicators: Primary Indicators (minimum o 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-Stained Lea Aquatic Fauna (B1: Marl Deposits (B15 Hydrogen Sulfide (Oxidized Rhizosph Presence of Reduc	3) 5) Codor (C1) eres on Living Roots (C3) ed Iron (C4) tion in Tilled Soils (C6) (C7)	Surface Drainag Moss Ti Dry-Sea Crayfisl Saturat Stuntec Geomo Shallow Microto	e Indicators (minimum e Soil Cracks (B6) ge Patterns (B10) frim Lines (B16) ason Water Table (C2) h Burrows (C8) tion Visible on Aerial Ir d or Stressed Plants (D orphic Position (D2) v Aquitard (D3) opographic Relief (D4)	magery (C9) 01)
Field Observations:						
Surface Water Present?	Yes No _ _		(inches):	-1		
Water Table Present?	Yes No	_ Depth ((inches):	Wetland H	lydrology Present?	Yes No
Saturation Present?	Yes No	Depth ((inches): 0			
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge, monitoring	well, aerial photos	, previous inspections), if	available:		
Remarks: The criterion for wetland hydro	logy is met. A positive	e indication of wet	land hydrology was obsei	rved (at leas	t two secondary indica	ators).

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	5	(4)
1. Tsuga canadensis	40	Yes	FACU	Are OBL, FACW, or FAC:		(A)
2. Fraxinus americana	30	Yes	FACU	Total Number of Dominant Species	10	(B)
3. Acer saccharum	15	No	FACU	Across All Strata:		`
. Carya ovata	10	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)
·				Prevalence Index worksheet:		
·				Total % Cover of:	<u>Multiply</u>	•
· -	95	= Total Cov	/er	OBL species 0	x 1 = _	0
apling/Shrub Stratum (Plot size:15 ft)		_		FACW species 120	x 2 =	240
. Rhamnus cathartica	20	Yes	FAC	FAC species 65	x 3 =	195
. Fraxinus americana	10	Yes	FACU	FACU species 125	x 4 =	500
3. Acer saccharum	10	Yes	FACU	UPL species 0	x 5 = _	0
. Rosa multiflora	10	Yes	FACU	Column Totals 310	(A) _	935 (B)
i. Nosa malamora		103	17100	Prevalence Index = B/A =	3	
·			-	Hydrophytic Vegetation Indicators:		
·				1- Rapid Test for Hydrophytic \	egetation/	
	50	= Total Cov	·or	2 - Dominance Test is > 50%		
lorb Stratum (Blot size) Eft)		_ TOTAL COV	/ei	$_{\checkmark}$ 3 - Prevalence Index is ≤ 3.01		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u>) . <i>Dryopteris carthusiana</i>	40	Yes	FACW	4 - Morphological Adaptations		supporting
. Impatiens capensis	30	Yes	FACW	data in Remarks or on a separate sh		
. Onoclea sensibilis	30	Yes	FACW	Problematic Hydrophytic Vege	-	
. Euthamia graminifolia	20	No	FAC	¹ Indicators of hydric soil and wetlan present, unless disturbed or proble	,	gy must be
. Amphicarpaea bracteata	10	No	FAC	Definitions of Vegetation Strata:	matic	
. Symphyotrichum lanceolatum	10	No	FACW	Tree – Woody plants 3 in. (7.6 cm) or	r moro in	diameter a
. Solidago gigantea	10	No	FACW	breast height (DBH), regardless of h		ulailletei a
3.			171011	Sapling/shrub – Woody plants less t		DBH and
·.).				greater than or equal to 3.28 ft (1 m		. D a a
				Herb – All herbaceous (non-woody)		gardless of
0			-	size, and woody plants less than 3.2		
1				Woody vines – All woody vines great	ter than 3.	.28 ft in
2	150	= Total Cov		height.		
Nood: Vino Chush in (Dlot sino) 20 ft	130	_ TOTAL COV	/ei	Hydrophytic Vegetation Present?	∕es 🗸 N	lo
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u>) . <i>Vitis riparia</i>	15	Yes	FAC			
		162	FAC			
l						
	15	_= Total Cov	/er			

Profile Desc	cription: (Describe t	to the	depth needed to d	docun	nent the	indicato	r or confirm the a	absence of indicato	ors.)
Depth	Matrix		Redox	(Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Text	ture	Remarks
0 - 8	10YR 3/1	95	10YR 3/6	5	С	M	Silty Cla	ay Loam	
8 - 20	10YR 4/4	85	5YR 4/6	15	С	M	Silty Cla	ay Loam	
		_						_	
			-	. —			·		
	-						•		
							-		
		- —		. —			-		
l .		_				 .			
	Concentration, D = I	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² L		Lining, M = Matrix.
Hydric Soil								Indicators for P	roblematic Hydric Soils³:
Histosol			Polyvalue Be					2 cm Muck ((A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark Su					Coast Prairi	e Redox (A16) (LRR K, L, R)
Black Hi			Loamy Muck			(LRR K,	L)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surfac	e (S7) (LRR K, L)
	d Layers (A5) d Below Dark Surfa	oco (A1	Depleted Ma					Polyvalue Be	elow Surface (S8) (LRR K, L)
	ark Surface (A12)	ice (A i	Depleted Da)		Thin Dark S	urface (S9) (LRR K, L)
	fucky Mineral (S1)		Redox Depr			,		Iron-Manga	nese Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)		Redox Bepi	C33101	15 (1 0)				loodplain Soils (F19) (MLRA 149B)
-	ledox (S5)								ic (TA6) (MLRA 144A, 145, 149B)
-	d Matrix (S6)							Red Parent	
	rface (S7) (LRR R, M	II DΔ 1.	/QR)					•	w Dark Surface (TF12)
Dark 3u	Hace (37) (LKK K, IV	ILIXA I	490)					Other (Expla	ain in Remarks)
3Indicators	of hydrophytic veg	etatior	n and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	ed or problematic.	
Restrictive I	_ayer (if observed):								
	Type:		None	_		Hydric	Soil Present?		Yes/_ No
	Depth (inches):								
Remarks:	,								
A positive in	ndication of hydric	soil wa	as observed. The o	riteri	on for hy	dric soil	is met.		
	,				,				

Vegetation Photos



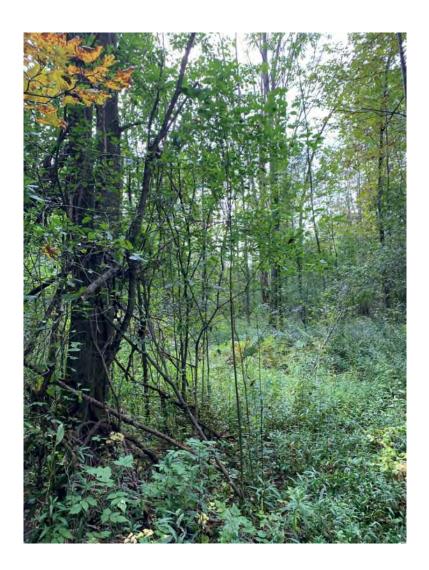




Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Project	oject	City/County: Spra	akers, Montgomery	Sampling Date: 2021-Sept-14		
Applicant/Owner: SunEast			State: NY	San	npling Point: W-JMP	'-21_UPL-1
Investigator(s): Jerry Peake, St	eve Spotts, Abi Ligh	nt	Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.): Saddle		Local relief (concave, conv	/ex, none): Co	nvex	Slope (%): 1 to 3
Subregion (LRR or MLRA):	.RR L		Lat: 42.841718907	2 Long: -74	1.4981645791	Datum: WGS84
Soil Map Unit Name: Lansing	silt loam, LaD				NWI classification:	
Are climatic/hydrologic conditior	is on the site typica	al for this time of ye	ear? Yes <u>✓</u> No	(If no, ex	(plain in Remarks.)	
Are Vegetation, Soil,	or Hydrology _	significantly di	sturbed? Are "Norm	al Circumstand	es" present? Ye	es No
Are Vegetation, Soil,	or Hydrology _	naturally prob	lematic? (If needed,	explain any ar	nswers in Remarks.)	
SUMMARY OF FINDINGS – A	Attach site man	showing sampli	ng noint locations trai	nsects impo	ortant features ef	rc
Hydrophytic Vegetation Present	-	No⁄_		130003, 111100	- rearie reactares, et	
Hydric Soil Present?		No	Is the Sampled Area withi	n a Wetland?	Yes	No⁄_
		No	<u> </u>			·
Wetland Hydrology Present? Remarks: (Explain alternative pr			If yes, optional Wetland S	ite ib.		
Wetland Hydrology Indicators: Primary Indicators (minimum of Surface Water (A1)	·	_ Water-Stained Lea		Surface So	dicators (minimum c bil Cracks (B6) Patterns (B10)	of two required)
High Water Table (A2)		_ Aquatic Fauna (B1		Moss Trim	n Lines (B16)	
Saturation (A3) Water Marks (B1)		_ Marl Deposits (B1 _ Hydrogen Sulfide		Dry-Seaso	on Water Table (C2)	
Sediment Deposits (B2)			neres on Living Roots (C3)	-	Burrows (C8)	
Drift Deposits (B3)		_ Presence of Redu	_		n Visible on Aerial Im	-
Algal Mat or Crust (B4)	_	='	ction in Tilled Soils (C6)		r Stressed Plants (D1	1)
Iron Deposits (B5)	_	_ Thin Muck Surface	e (C7)	'	hic Position (D2) quitard (D3)	
Inundation Visible on Aerial	magery (B7)	Other (Explain in	Remarks)		ographic Relief (D4)	
Sparsely Vegetated Concave	Surface (B8)				ral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No _	•	(inches):	-		
Water Table Present?	Yes No _	<u>✓</u> Depth	(inches):	Wetland Hyd	rology Present?	Yes No
Saturation Present?	Yes No _	<u>✓</u> Depth	(inches):			
(includes capillary fringe)						
Remarks: The criterion for wetland hydrol						

ree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant S		1	(4)
. Tsuga canadensis	40	Yes	FACU	Are OBL, FACW, or FAC	:		(A)
. Acer saccharum	30	Yes	FACU	Total Number of Domi	nant Species	6	(B)
. Ulmus americana	20	No	FACW	Across All Strata:			
. Populus grandidentata	20	No	FACU	Percent of Dominant S		16.7	(A/B)
. Tilia americana	10	No	FACU	Are OBL, FACW, or FAC			
				Prevalence Index work			_
				Total % Cover		Multiply I	-
	120	= Total Cov	er	OBL species	0	x 1 =	0
apling/Shrub Stratum (Plot size:15 ft)		-		FACW species	40	x 2 =	80
. Acer saccharum	15	Yes	FACU	FAC species	3	x 3 =	9
. Carya ovata	10	Yes	FACU	FACU species	130	x 4 =	520
. Ulmus americana	5	No	FACW	- UPL species	0	x 5 =	0
				- Column Totals	173	(A)	609 (B)
	. ——			Prevalence Ir	ndex = B/A =	<u>3.5</u>	
	- ——			Hydrophytic Vegetation	n Indicators:		
	- ——			1- Rapid Test for I	Hydrophytic \	/egetation	
	30	= Total Cov	or	2 - Dominance Te	st is > 50%		
lerb Stratum (Plot size: _ 5 ft _)		_ TOTAL COV	CI	3 - Prevalence Inc	dex is $\leq 3.0^{1}$		
. Dryopteris carthusiana	15	Yes	FACW	4 - Morphological	Adaptations	¹ (Provide s	upporting
	5			data in Remarks or on			
. Fraxinus americana		Yes	FACU	- Problematic Hydr			
B. Geum canadense	3	No	FAC	- Indicators of hydric so		, .	y must be
	- ——			present, unless disturb	ed or proble	matic	
				Definitions of Vegetation			
.				Tree – Woody plants 3			iameter a
				breast height (DBH), re	-	-	
				Sapling/shrub – Woody			BH and
·				greater than or equal t			
0				Herb – All herbaceous	-		ardless of
1				size, and woody plants			00 ft :
2				Woody vines – All wood height.	dy vines grea	ter than 3	28 IL IN
	23	= Total Cov	er				
Voody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetatio	n Present? \	Yes N	0 _✔_
•							
				_			
l							
-	0	= Total Cov	er	-			

Depth (inches) Matrix (inches) Redox Features 0 - 10 10YR 3/4 100 Silt Loam 10 - 18 10YR 4/6 100 Silty Clay Loam	Remarks
0 - 10 10YR 3/4 100 Silt Loam 10 - 18 10YR 4/6 100 Silty Clay Loam	Remarks
10 - 18 10YR 4/6 100 Silty Clay Loam	
-	
-	
<u> </u>	
 	
_ ·	
_ 	
1Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M	
Hydric Soil Indicators: Indicators for Problematic	: Hydric Soils³:
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR I	K, L, MLRA 149B)
Histic Epipedon (A2)	16) (LRR K, L, R)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Pe	eat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR	K, L)
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface	ce (S8) (LRR K, L)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Third Dark Surface (S9)	(LRR K, L)
Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain S	Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (ML	_RA 144A, 145, 149B)
Sandy Redox (S5) Red Parent Material (F.	
Stripped Matrix (S6) Very Shallow Dark Suri	
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Rema	
3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Restrictive Layer (if observed):	
Type: None Hydric Soil Present? Yes	No <u>/</u>
Depth (inches):	
Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met.	



Photo of Sample Plot North



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pr	oject C	City/County: Sprakers, Mon	tgomery	Saı	Sampling Date: 2021-Sept-14			
Applicant/Owner: SunEast		State: NY			Sampling Point: W-JMP-22_PEM-1			
Investigator(s): Jerry Peake, S	eve Spotts, Abi Light	Se	ction, Township,	Range: NA				
Landform (hillslope, terrace, etc	.): Terrace	Local relie	f (concave, conv	ex, none): Con	cave	Slope (%): 1 to 3		
Subregion (LRR or MLRA):	LRR L	Lat	42.838653126	6 Long: -74.4	4951699372	Datum: WGS84		
Soil Map Unit Name: Darien	silt loam, DaB				NWI classification	: None		
Are climatic/hydrologic conditio	ns on the site typical f	or this time of year?	Yes No	(If no, exp	lain in Remarks.)			
Are Vegetation 🟒, Soil 🟒,	or Hydrology	significantly disturbed?	Are "Norm	al Circumstance	s" present?	/es No _ ✓		
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed,	explain any ans	wers in Remarks.)		
Hydrophytic Vegetation Presen Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative p Covertype is PEM. Area is wetla	t? Yes/ Yes/ Yes/ rocedures here or in a	No Is the San No If yes, opt	npled Area withi ional Wetland Si	n a Wetland? te ID:	Yes _ W-JM	✓_ No IP-22		
HYDROLOGY Wetland Hydrology Indicators:								
Primary Indicators (minimum o	f one is required: che	ck all that apply)		Secondary Indi	cators (minimum	of two required)		
•	•			Surface Soil		or two required;		
✓ Surface Water (A1)		Vater-Stained Leaves (B9)						
⁄ High Water Table (A2) ⁄ Saturation (A3)		Aquatic Fauna (B13) Marl Deposits (B15)			Moss Trim Lines (B16)			
Water Marks (B1)		•		Dry-Season Water Table (C2)				
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)			Crayfish Burrows (C8)			
Drift Deposits (B3)		Oxidized Rhizospheres on Living Roots (C3)			Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)			Stunted or Stressed Plants (D1)			
Algai Mat of Crust (B4) Iron Deposits (B5)		Thin Muck Surface (C7)	✓ Geomorphic Position (D2)					
•		Other (Explain in Remarks)		Shallow Aquitard (D3)				
	nundation Visible on Aerial Imagery (B7) Other (Explain in Remarl parsely Vegetated Concave Surface (B8)				Microtopographic Relief (D4)			
	. Surface (Bo)			FAC-Neutra	l Test (D5)			
Field Observations:	Van (Na	Danth (in aboat)	2					
Surface Water Present?	Yes _ ✓ No		3			V NI-		
Water Table Present?	Yes No		9	Wetland Hydro	logy Present?	Yes No		
Saturation Present?	Yes 🟒 No	_ Depth (inches):	13					
(includes capillary fringe)								
(includes capillary fringe) Describe Recorded Data (streated) Remarks: The criterion for wetland hydro					d secondary indic	ators were presen		

,	A la la - 6 -	D t t	landinata	Dominance Test worksheet				
Tree Stratum (Plot size:30 ft)		Dominant Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:				
1. Acer saccharum	25	Yes	FACU			3	(A)	
Acer saccinarum Fraxinus americana	15	Yes	FACU	Total Number of Dominant	Species			
-		162	FACU	Across All Strata:	'	6	(B)	
3.				Percent of Dominant Specie	es That		(A (D)	
4.				Are OBL, FACW, or FAC:		50	(A/B)	
5.				Prevalence Index workshee	et:			
6.				Total % Cover of:		Multiply	<u>Ву:</u>	
7				OBL species	65	x 1 =	65	
	40	= Total Cov	er	FACW species	35	x 2 =	70	
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	45	x 3 =	135	
1. Cornus racemosa	40	Yes	FAC	FACU species	65	x 4 =	260	
2. Cornus amomum	15	Yes	FACW	UPL species	0	x 5 =	0	
3. Salix bebbiana	10	No	FACW	Column Totals	210	(A)	530 (B)	
4				Prevalence Index	: = B/A =	2.5		
5				Hydrophytic Vegetation Ind				
6.				1- Rapid Test for Hydr		agetation		
7				2 - Dominance Test is		egetation		
	65	= Total Cov	er	✓ 3 - Prevalence Index is				
Herb Stratum (Plot size:5 ft)				4 - Morphological Ada		(Provide	supporting	
1. Eleocharis mamillata	40	Yes	OBL	data in Remarks or on a se			supporting	
2. Cyperus rotundus	25	Yes	FACU	Problematic Hydroph	•		nlain)	
3. Ludwigia palustris	15	No	OBL	¹Indicators of hydric soil an			•	
4. Onoclea sensibilis	10	No	FACW	present, unless disturbed or problematic Definitions of Vegetation Strata:				
5. Wolffia columbiana	10	No	OBL					
6. Barbarea vulgaris	5	No	FAC	Tree – Woody plants 3 in. (7		more in o	diameter at	
7.				breast height (DBH), regard	-			
8.				Sapling/shrub - Woody plan	nts less th	nan 3 in. D	BH and	
9.				greater than or equal to 3.2	28 ft (1 m)	tall.		
10.				Herb – All herbaceous (non	ո-woody) բ	olants, reg	gardless of	
11.				size, and woody plants less	than 3.28	3 ft tall.		
12.				Woody vines – All woody vi	nes great	er than 3.	28 ft in	
	105	= Total Cov	er	height.				
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetation Pr	esent? Y	es 🟒 N	lo	
1.								
2.				•				
3.								
4.				•				
	0	= Total Cov	er	•				
		-						
Remarks: (Include photo numbers here or on a separate	-							
Active agricultural field. A positive indication of hydroph	ytic veget	ation was o	bserved (Pre	evalence Index is \leq 3.00).				

Profile Desc	ription: (Describe t	to the	depth needed to			indicato	r or confirm the al	bsence of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 10	10YR 4/2	90	5YR 3/4	10	С	M	Clay Loar	
10 - 20	10YR 3/2	80	5YR 5/8	20		M	Clay Loar	
10 20	1011(3/2	- 00	311(3/6				Cidy Loui	
		- —						
		· —						
		-						
		-		_				
		· —						
		-						
		- —						
¹Type: C = C	oncentration, D = I	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil I	ndicators:							Indicators for Problematic Hydric Soils ³ :
Histosol			•				R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark Si					Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi			Loamy Mucl			(LRR K, I	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gley					Dark Surface (S7) (LRR K, L)
	d Layers (A5)		Depleted Ma					Polyvalue Below Surface (S8) (LRR K, L)
	d Below Dark Surfa	ice (A i	· 			`		Thin Dark Surface (S9) (LRR K, L)
	ark Surface (A12) lucky Mineral (S1)		Depleted Da Redox Depr)		Iron-Manganese Masses (F12) (LRR K, L, R)
-			Redox Depi	622101	15 (ГО)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	lleyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_	edox (S5)							Red Parent Material (F21)
	Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M	ILKA 1	49B)					_✓ Other (Explain in Remarks)
3Indicators	of hydrophytic veg	etatior	n and wetland hyd	Irolog	y must b	e preser	nt, unless disturbe	ed or problematic.
Restrictive I	ayer (if observed):							
	Type:		None			Hydric	Soil Present?	Yes No
	Depth (inches):							
Remarks:								
A positive ir	ndication of hydric	soil wa	as observed. Soil s	ignifi	antly dis	turbed a	as a result of tilling	g.

Hydrology Photos



Vegetation Photos



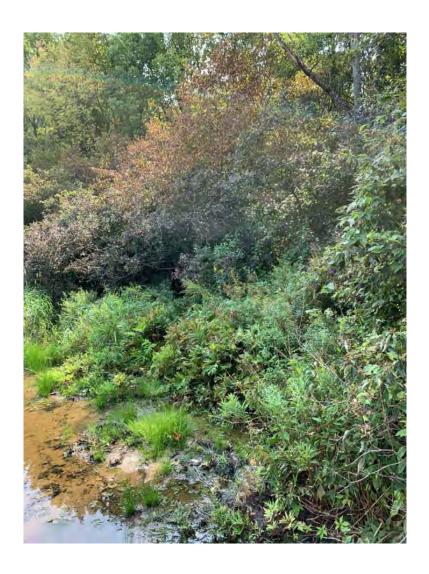




Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	ject	City/County: Spra	akers, Montgomery County	Sampling E	Date: 2021-Sept-14
Applicant/Owner: SunEast			State: NY	Sampling Poi	nt: W-JMP-22_UPL-1
Investigator(s): Jerry Peake, Sto	eve Spotts, Abi Ligh	nt	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.)	: Flat		Local relief (concave, conv	ex, none): None	Slope (%): 1 to 3
Subregion (LRR or MLRA):	RR L		Lat: 42.838640748	8 Long: -74.4952733	423 Datum: WGS84
Soil Map Unit Name: Darien si	lt loam, DaB			NWI cla	ssification: None
Are climatic/hydrologic condition	s on the site typica	l for this time of ye	ear? Yes 🟒 No	(If no, explain in R	emarks.)
Are Vegetation, Soil,	or Hydrology _	significantly di	sturbed? Are "Norm	al Circumstances" prese	nt? Yes No
Are Vegetation, Soil,	or Hydrology _	naturally prob	lematic? (If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS – A	-	showing sampli	ng point locations, trai	nsects, important fe	atures, etc.
Hydric Soil Present?		No	Is the Sampled Area withi	n a Wetland?	Yes No✓
_		No	<u>'</u>		
Wetland Hydrology Present? Remarks: (Explain alternative pr	· · · · · · · · · · · · · · · · · · ·		If yes, optional Wetland S	te id:	
HYDROLOGY					
Wetland Hydrology Indicators:					
Primary Indicators (minimum of	one is required; ch	neck all that apply)		Secondary Indicators (r	minimum of two required)
Surface Water (A1)		_ Water-Stained Le	aves (RO)	Surface Soil Cracks	(B6)
High Water Table (A2)		_ Water-Stained Lea _ Aquatic Fauna (B1		Drainage Patterns (B10)
Saturation (A3)	_	_ Marl Deposits (B1		Moss Trim Lines (B1	
Water Marks (B1)		_ Hydrogen Sulfide		Dry-Season Water 1	
Sediment Deposits (B2)	_	_Oxidized Rhizosp	heres on Living Roots (C3)	Crayfish Burrows (C	.8) n Aerial Imagery (C9)
Drift Deposits (B3)	_	_ Presence of Redu	ced Iron (C4)	Stunted or Stressed	
Algal Mat or Crust (B4)	_		ction in Tilled Soils (C6)	Geomorphic Position	
Iron Deposits (B5)		_ Thin Muck Surfac		Shallow Aquitard (D	
Inundation Visible on Aerial		_ Other (Explain in	Remarks)	Microtopographic R	
Sparsely Vegetated Concave	Surface (B8)			FAC-Neutral Test (D	
Field Observations:					
Surface Water Present?	Yes No _	<u>✓</u> Depth	(inches):		
Water Table Present?	Yes No _	✓ Depth	(inches):	Wetland Hydrology Pre	esent? Yes No
Saturation Present?	Yes No _		(inches):		
(includes capillary fringe)					
Describe Recorded Data (stream	gauge monitoring	g well perial photo	s provious inspections) if	vailable:	
Remarks: The criterion for wetland hydrol					

Absolute	Dominant	Indicator				
% Cover	Species?	Status	- I	•	3	(A)
30	Yes	FACU	- I			`
10	Yes	FACW		linant Species	7	(B)
10	Yes	FACU		Consider That	-	
				'	42.9	(A/B)
					Multiply I	Rv.
			· ·			0
50	= Total Cov	er	·		_	50
			· ·		_	75
25	Yes	FAC	·		_	400
15	Yes	FACW			_	
10	No	FACU	· ·		_	200
10	No	FACU			-	725 (B)
			Prevalence	Index = B/A =	3.8	 -
			Hydrophytic Vegetation	on Indicators:		
			1- Rapid Test for	Hydrophytic V	egetation/	
60	= Total Cov	er	2 - Dominance T	est is > 50%		
	- 10101 COV	Ci	3 - Prevalence Ir	$1 \text{dex is} \leq 3.0^{1}$		
40	Ves	LIPI				supporting
				-		
			,		, .	gy must be
	NO	FACU		'	matic	
			_			
			- , ,			liameter at
			-	•	_	DII
						BH and
			-			ardlace of
				-		ai uless oi
						28 ft in
			-	ody viries great	ter triair 5	2011111
80	= Total Cov	er		D	/ N	
			Hydrophytic vegetati	ion Present?	res N	0
			-			
			_			
			1			
			_			
			-			
	% Cover 30	% Cover Species? 30 Yes 10 Yes 10 Yes 10 Yes 50 = Total Cov 25 Yes 10 No 10 No 40 Yes 20 Yes 10 No 10 No	30 Yes FACU 10 Yes FACW 10 Yes FACU 10 Yes FACU 50 = Total Cover 25 Yes FACW 10 No FACU 10 No FACU 10 No FACU 10 No FACU 10 No FACU 10 No FACU 10 No FACU 10 No FACU 10 No FACU	Section Species Status Secies Status Number of Dominant Species That Are OBL, FACW, or FAC:	Section Species Status 30 Yes FACU 10 Yes FACW 10 Yes FACU 25 Yes FACW 10 No FACU 10	

Profile Des	cription: (Describe	to the d	lepth needed to o	docun	nent the i	indicato	r or confirm the al	bsence of indicators	5.)
Depth	Matrix		Redo	x Feat	ures				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks
0 - 9	10YR 3/4	100		- —			Clay Loa		
9 - 16	10YR 3/4	25	5YR 3/4	20	C	M	Clay Loa		
9 - 16	10YR 4/2	55					Clay Loa	<u> </u>	
16 - 20	10YR 4/4	95	7.5YR 4/6	5	C	М	Clay Loa	m	
-									
-									
¹Type: C = 0	Concentration, D =	Depleti	on, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore L	ining, M = Matrix.
Hydric Soil	Indicators:	•						Indicators for Prol	blematic Hydric Soils ³ :
Histoso			Polyvalue Be	elow S	urface (S	8) (LRR	R, MLRA 149B)		0) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su						Redox (A16) (LRR K, L, R)
	istic (A3)		Loamy Muck						eat or Peat (S3) (LRR K, L, R)
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (
Stratifie	ed Layers (A5)		Depleted Ma	atrix (I	- 3)				ow Surface (S8) (LRR K, L)
	ed Below Dark Surf	ace (A1						Thin Dark Surf	
	ark Surface (A12)		Depleted Da)			se Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)				odplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)								TA6) (MLRA 144A, 145, 149B)
_	Redox (S5)							Red Parent Ma	
Strippe	d Matrix (S6)								Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, N	MLRA 14	19B)					Other (Explain	
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	•	
	Layer (if observed)		Ţ.			İ		'	
	Type:		None			Hydric	Soil Present?	Yes	No / _
	Depth (inches):			-					
Remarks:	Depart (interies).	<u> </u>							
	indication of hydr	ic soils v	was observed Th	a crita	rion for	hvdric s	nil is not met		
No positive	. indication of rigal	10 30113 1	was observed. III	e crite	.11011101	riyuric 3	on is not met.		



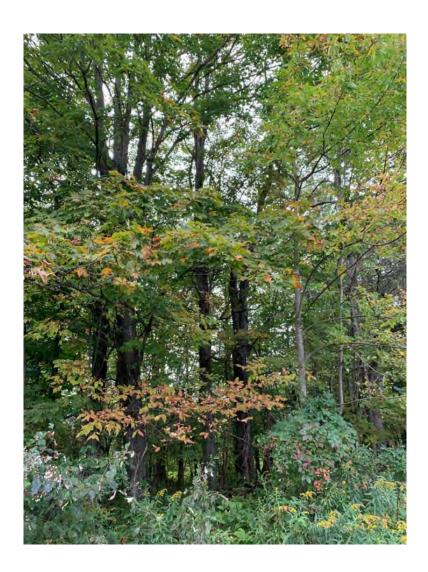
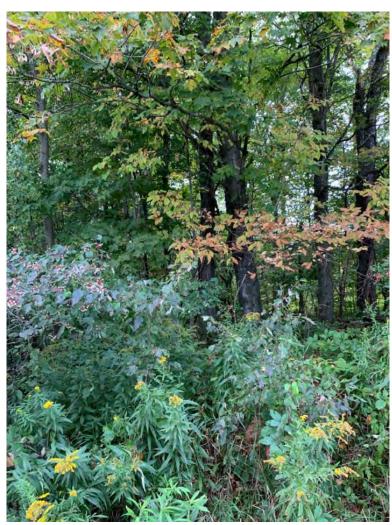




Photo of Sample Plot North



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	akers, Montgomery County	/	Sampling Date: 202	21-Sept-14
Applicant/Owner: SunEast		<u> </u>	State: NY		Sampling Point: W-JM	IP-23_PEM-1
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Lig	ght	Section, Township,	Range: NA	4	
Landform (hillslope, terrace, etc.)	: Terrace		Local relief (concave, conv	/ex, none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA):	RR L		Lat: 42.846958382	21 Long:	-74.4887195064	Datum: WGS84
Soil Map Unit Name: Burdett	channery silt loan	n, BuB			NWI classificatio	n: None
Are climatic/hydrologic condition	s on the site typic	cal for this time of ye	ar? Yes 🟒 No	(If no	, explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology	significantly di	sturbed? Are "Norm	al Circumst	ances" present?	Yes No
Are Vegetation, Soil,	or Hydrology	naturally prob	lematic? (If needed,	explain an	y answers in Remarks.	.)
SUMMARY OF FINDINGS – A	Nttach site map	showing sampli	ng point locations, tra	nsects, im	portant features,	etc.
Hydrophytic Vegetation Present	? Yes	_ ✓ _ No				
Hydric Soil Present?	Yes	_ ✓ _ No	Is the Sampled Area with	in a Wetlan	d? Yes	No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland S	ite ID:	W-IN	MP-23
Remarks: (Explain alternative pr						
Covertype is PEM. Area is wetlar						
Covertype is PEM. Area is wellar	id, all three wella	no parameters are p	resent.			
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required;	check all that apply)		-	<u>/ Indicators (minimum</u>	of two required)
Surface Water (A1)		Water-Stained Lea	aves (B9)		e Soil Cracks (B6)	
High Water Table (A2)	_	Aquatic Fauna (B1			ge Patterns (B10)	
Saturation (A3)	_	Marl Deposits (B1			rim Lines (B16)	
Water Marks (B1)	_	Hydrogen Sulfide		-	ason Water Table (C2)	
Sediment Deposits (B2)	_		neres on Living Roots (C3)	-	sh Burrows (C8)	
Drift Deposits (B3)	-	Presence of Redu	_	Satura	tion Visible on Aerial II	magery (C9)
Algal Mat or Crust (B4)	_		ction in Tilled Soils (C6)	Stunte	d or Stressed Plants ([01)
Algai Mat of Crust (B4)	-	Thin Muck Surface		∕ Geomo	orphic Position (D2)	
Iron Deposits (B3) Inundation Visible on Aerial I	- - - - -	Other (Explain in F		Shallov	w Aquitard (D3)	
		_ Otrier (Explain in i	Remarks)	Microt	opographic Relief (D4)	
Sparsely Vegetated Concave	Surface (Bo)			FAC-Ne	eutral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No _	<u>✓</u> Depth	(inches):	_		
Water Table Present?	Yes 🔽 No	Depth	(inches): 10	Wetland H	lydrology Present?	Yes No
Saturation Present?	Yes No _	✓ Depth	(inches):	_		
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge, monitori	ng well, aerial photo	s, previous inspections), if	available:		
Remarks:						
The criterion for wetland hydrol	ogy is met. A posi	itive indication of we	tland hydrology was obser	ved (primai	ry and secondary indic	cators were present).
İ						

				1		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
1				Total Number of Dominant Species		
2.				Across All Strata:	4	(B)
3.				Percent of Dominant Species That		
4				Are OBL, FACW, or FAC:	25	(A/B)
5				Prevalence Index worksheet:		
6.				Total % Cover of:	Multiply	<u>Ву:</u>
7				OBL species 40	x 1 =	40
5 1: 45 1 6: 4 (5) 4 5 6 3	0	= Total Cove	er	FACW species 60	x 2 =	120
Sapling/Shrub Stratum (Plot size: 15 ft)	4.5	V	FACIL	FAC species 25	x 3 =	75
1. Lonicera morrowii	15	Yes	FACU	FACU species 135	x 4 =	540
2.				UPL species 0	x 5 =	0
3.				Column Totals 260	(A)	775 (B)
4				Prevalence Index = B/A =	3	
5				Hydrophytic Vegetation Indicators:		
6.				1- Rapid Test for Hydrophytic	Vegetation	
7				2 - Dominance Test is > 50%	Ü	
	15	= Total Cove	er	\checkmark 3 - Prevalence Index is $\le 3.0^{\circ}$		
Herb Stratum (Plot size: 5 ft)			FACIL	4 - Morphological Adaptations	1 (Provide	supporting
1. Solidago canadensis	60	Yes	FACU	data in Remarks or on a separate s	heet)	
2. Galium mollugo	50	Yes	FACU	Problematic Hydrophytic Vege	-	
3. Typha angustifolia	40	Yes	OBL	¹ Indicators of hydric soil and wetlar		gy must be
4. Onoclea sensibilis	30	No	FACW	present, unless disturbed or proble	matic	
5. Symphyotrichum lanceolatum	20	No No	FACW	Definitions of Vegetation Strata:		
6. Equisetum arvense		No	FAC	Tree – Woody plants 3 in. (7.6 cm) o		diameter at
7. Symphyotrichum novae-angliae	10	No	FACW	breast height (DBH), regardless of h	_	
8. Centaurea jacea	10	No	FACU	Sapling/shrub – Woody plants less		OBH and
9. Ranunculus acris	5	No	FAC	greater than or equal to 3.28 ft (1 n Herb – All herbaceous (non-woody)		rardlass of
10				size, and woody plants less than 3		gai uless oi
11				Woody vines – All woody vines grea		28 ft in
12				height.		.20
	245	= Total Cove	er	Hydrophytic Vegetation Present?	Vac / N	lo.
Woody Vine Stratum (Plot size: 30 ft)				Trydrophytic vegetation i resent:	163 1	
1						
2.						
3.						
4						
	0	= Total Cove	er			
Remarks: (Include photo numbers here or on a separa	ite sheet.)					
A positive indication of hydrophytic vegetation was ob	served (Pre	valence Inde	ex is ≤ 3.00)).		

Profile Des	cription: (Describe	to the	depth needed to	docu	ment the	indicato	r or confirm the a	absence of indicate	ors.)
Depth	Matrix		Redo	x Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture	Remarks
0 - 12	10YR 3/2	90	2.5YR 3/6	5		M/PL	Silty Cla	y Loam	
12 - 20	10YR 3/2	80	7.5YR 5/8	20				<u> </u>	
			7,57,757	. <u>=</u>				-	
		- —		-					
							-		
							-		
				- —				-	
¹Type: C = 0	Concentration, D =	Deple	tion, RM = Reduce	ed Ma	trix, MS	= Masked	Sand Grains. ² L	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils³:
Histoso	l (A1)		Polyvalue B	Below	Surface ((S8) (LRR	R, MLRA 149B)	2 cm Much	(A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark S						e Redox (A16) (LRR K, L, R)
	istic (A3)		Loamy Mud	ky Mi	neral (F1) (LRR K,	L)		
Hydroge	en Sulfide (A4)		Loamy Gley	ed M	atrix (F2)				/ Peat or Peat (S3) (LRR K, L, R)
Stratifie	d Layers (A5)		Depleted M	latrix	(F3)				e (S7) (LRR K, L)
Deplete	d Below Dark Surf	ace (A							elow Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted D			7)			urface (S9) (LRR K, L)
Sandy N	Mucky Mineral (S1)		Redox Dep					_	nese Masses (F12) (LRR K, L, R)
_	Gleyed Matrix (S4)								loodplain Soils (F19) (MLRA 149B)
-	Redox (S5)								ic (TA6) (MLRA 144A, 145, 149B)
-	d Matrix (S6)							Red Parent	Material (F21)
			400)					Very Shallo	w Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, I	MLRA 1	(49B)					Other (Expl	ain in Remarks)
3Indicators	of hydrophytic veg	getatio	n and wetland hy	drolo	gy must l	be preser	nt, unless disturbe	ed or problematic	
Restrictive	Layer (if observed)):							
	Type:		None			Hydric	Soil Present?		Yes/_ No
	Depth (inches):			-		,			
-	Deptil (iliches).	_							.
Remarks:									
A positive i	ndication of hydric	soil w	as observed. The	criter	ion for h	ydric soil	is met.		







Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery Count	.y	Sampling Date: 202	21-Sept-14
Applicant/Owner: SunEast		<u> </u>	State: N	/	Sampling Point: W-JM	1P-23_PUB-1
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Ligh	nt	Section, Township	o, Range: N	Α	
Landform (hillslope, terrace, etc.)): Terrace		Local relief (concave, cor	vex, none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA): L	.RR L	·	Lat: 42.846644	Long:	-74.488712	Datum: WGS84
Soil Map Unit Name: Burdett	channery silt loam	, BuB			NWI classificatio	n: PUS
Are climatic/hydrologic condition	s on the site typica	al for this time of yea	ar? Yes <u>✓</u> N	o (If no	o, explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology ₋	significantly dis	turbed? Are "Norr	nal Circums	tances" present?	Yes No
Are Vegetation, Soil,	or Hydrology ₋	naturally proble	ematic? (If needed	l, explain an	y answers in Remarks	.)
SUMMARY OF FINDINGS – A	Attach site map	showing samplin	ng point locations, tra	nsects, in	nportant features,	etc.
Hydrophytic Vegetation Present	? Yes _	✓_ No				
Hydric Soil Present?	Yes _	✓_ No	Is the Sampled Area with	nin a Wetlan	d? Yes	No
Wetland Hydrology Present?	Yes _	No	If yes, optional Wetland	Site ID:	W-	MP-23
Remarks: (Explain alternative pr	· · · · · · · · · · · · · · · · · · ·					
Covertype is PUB. Area is wetlan	d, all three wetlan	d parameters are pr	esent.			
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required: c	hack all that annly)		Secondan	y Indicators (minimum	of two required)
Trimary indicators (minimum or	one is required, ci	песк ан спасарртут		-	e Soil Cracks (B6)	rortwo requirea;
∕ Surface Water (A1)	_	_ Water-Stained Lea	ves (B9)		age Patterns (B10)	
∕ High Water Table (A2)	_•	∠ Aquatic Fauna (B1:	3)		•	
✓ Saturation (A3)	_	_ Marl Deposits (B15	5)		Trim Lines (B16)	
Water Marks (B1)	_	_ Hydrogen Sulfide (Odor (C1)		eason Water Table (C2)	
Sediment Deposits (B2)	_	_ Oxidized Rhizosph	eres on Living Roots (C3)		sh Burrows (C8)	(60)
Drift Deposits (B3)	_	_ Presence of Reduc	ced Iron (C4)		ition Visible on Aerial I	
Algal Mat or Crust (B4)	_	Recent Iron Reduc	tion in Tilled Soils (C6)		ed or Stressed Plants (I	(۱ر
Iron Deposits (B5)		_ _ Thin Muck Surface			orphic Position (D2)	
Inundation Visible on Aerial I	magery (B7)	_ _ Other (Explain in R			w Aquitard (D3)	
Sparsely Vegetated Concave					copographic Relief (D4))
				FAC-N	eutral Test (D5)	
Field Observations:	Van (Na	Danath	(in all a a). 45			
Surface Water Present?	Yes _ ✓ No _	·	(inches): 15	-L		V N-
Water Table Present?	Yes No		(inches): 0	- Wetland F	Hydrology Present?	Yes No
Saturation Present?	Yes 🟒 No _	Depth	(inches): 0	_		
(includes capillary fringe)						
Describe Recorded Data (stream	າ gauge, monitorin	g well, aerial photos	, previous inspections), if	f available:		
Domonto.						
Remarks:						
The criterion for wetland hydrol	ogy is met. A posit	ive indication of wet	land hydrology was obse	rved (prima	ry and secondary indi	cators were present).

ree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant			
	70 COVE	species:	Status	Are OBL, FACW, or FAC	•	1	(A)
				Total Number of Domi	inant Species	1	(B)
				Percent of Dominant S Are OBL, FACW, or FAC		100	(A/B)
				Prevalence Index work			
				Total % Cover		Multiply B	sv:
				OBL species	 75	x 1 =	7 75
	0	= Total Cov	er	FACW species	0	x 2 =	0
pling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
				FACU species	0	x 4 =	0
				UPL species	0	x 5 =	0
				Column Totals	75	(A)	75 (B)
					ndex = B/A =	1	75 (0
				Hydrophytic Vegetatio			
				1- Rapid Test for		/ogotation	
				2 - Dominance Te		egetation	
	0	= Total Cov	er	✓ 3 - Prevalence Inc			
erb Stratum (Plot size: <u>5 ft</u>)				4 - Morphologica		l (Dravida c	unnartin
Myriophyllum spicatum	75	Yes	OBL	data in Remarks or on			upportii
				Problematic Hyd			ılain)
				¹Indicators of hydric so			
				present, unless disturb		-	y mast b
				Definitions of Vegetati		Tidele	
				Tree – Woody plants 3		more in d	iameter
				breast height (DBH), re			idifficter
				Sapling/shrub - Wood	-	-	BH and
				greater than or equal			
				Herb – All herbaceous			ardless c
				size, and woody plants			
· <u> </u>				Woody vines - All woo			28 ft in
2	75	- Total Cov		height.	, ,		
Control Control (Plateins 20 ft)	75	= Total Cov	er	Hydrophytic Vegetation	on Present? \	es 🗸 No)
oody Vine Stratum (Plot size: <u>30 ft</u>)				, , , , , , , , ,			
				•			
-							
	0	= Total Cov	er	I			

ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Jocation: PL = Pore Lining, M = Matrix.** Indicators for Problematic Hydric Soils?	inches) Color (moist)	% Color (moist)	% Type¹ Loc	Texture	Remarks
Indicators for Problematic Hydric Soils?: _ Histosol (A1)	<u>-</u>				
Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1)		· -			
Indicators for Problematic Hydric Soils?: Histosol (A1)		· <u> </u>			
Indicators for Problematic Hydric Soils?: _ Histosol (A1)		· 			
Indicators for Problematic Hydric Soils?: _ Histosol (A1)	 -	· -			
ydric Soil Indicators: _ Histosol (A1)		· —		<u> </u>	
Indicators for Problematic Hydric Soils?: _ Histosol (A1)		· — ———	_		
ydric Soil Indicators: _ Histosol (A1)		· – – – – – – – – – – – – – – – – – – –			
Indicators for Problematic Hydric Soils?: _ Histosol (A1)		. — —			
ydric Soil Indicators: _ Histosol (A1)					
Indicators for Problematic Hydric Soils?: _ Histosol (A1)		. — ———			
Indicators for Problematic Hydric Soils?: _ Histosol (A1)	ype: C = Concentration, D = [Depletion, RM = Reduced	Matrix, MS = Mas	ked Sand Grains. ² Lo	ocation: PL = Pore Lining, M = Matrix.
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Follyvalue Below Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Follyvalue Below Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Follyvalue Below Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Follyvalue Below Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Follyvalue Below Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L)			, , ,		
_ Histic Epipedon (A2)	•	Polyvalue Be	low Surface (S8) (L	RR R, MLRA 149B)	•
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		Thin Dark Su	rface (S9) (LRR R, N	ILRA 149B)	
Stratified Layers (A5)		•		K, L)	
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MRR 149B) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR R, MLRA 149B) Depth (inches): Hydric Soil Present? Polyvatile Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thon-Manganese Masses (F12) (LRR K, L) Thon-Manganese Masses (F12) (LRR K, L) Thon-Manganese Masses (F12) (LRR K, L) Thon-Manganese Masses (F12) (LRR K, L) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LRR K, L, R) Thon-Manganese Masses (F12) (LR		, ,			•
Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (F7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) Addicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Extrictive Layer (if observed):	•	· ·			Polyvalue Below Surface (S8) (LRR K, L)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Addicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Strictive Layer (if observed): Type: None Hydric Soil Present? Yes No Depth (inches): Very Shallow Dark Surface (TF12)	= '	· · · · · · · · · · · · · · · · · · ·			Thin Dark Surface (S9) (LRR K, L)
	= : : :	· ·			
			(,		•
Red Parent Material (F21) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) adicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed):					•
_ 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): Type: None Hydric Soil Present? Yes No Depth (inches): emarks: ue to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric. Soils were assumed to be hydric due to the presence of					
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: ue to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric. Soils were assumed to be hydric due to the presence of	_ Dark Surface (S7) (LRR R, M	LRA 149B)			
estrictive Layer (if observed): Type: None Hydric Soil Present? Yes _ No Depth (inches): emarks: ue to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric. Soils were assumed to be hydric due to the presence of	adicators of hydrophytic year	station and wotland hyd	rology must be pro	scant unlace disturba	•
Type: None Hydric Soil Present? Yes _ No Depth (inches): emarks: ue to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric. Soils were assumed to be hydric due to the presence of		tation and wetland nya	rology must be pre	seric, ariiess distarbe	d of problematic.
Depth (inches): emarks: ue to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric. Soils were assumed to be hydric due to the presence of		None	Hve	dric Soil Present?	Yes / No
emarks: ue to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric. Soils were assumed to be hydric due to the presence of	• •		.,,		
ue to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric. Soils were assumed to be hydric due to the presence of					
				•	vere assumed to be hydric due to the presence of

Hydrology Photos



Photo of Sample Plot East



Applicant/Owner: SunEast Investigator(s): Jerry Peake, Str	oject	City/County: Spra	kers, Montgomery County	Sampling	g Date: 2021-Sept-14	
Investigator(s): Jerry Peake, St			State: NY	Sampling P	Point: W-JMP-23_UPL-1	
	eve Spotts, Abi Light		Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.)): Terrace		Local relief (concave, conve	ex, none): None	Slope (%): 1	to 3
Subregion (LRR or MLRA):	_RR L		Lat: 42.8470274436	6 Long: -74.488769	98738 Datum: WGS	84
Soil Map Unit Name: Burdett	channery silt loam, E	3uB		NWI c	classification: None	
Are climatic/hydrologic conditior	ns on the site typical	for this time of yea	ar? Yes <u>✓</u> No	(If no, explain in	Remarks.)	
Are Vegetation, Soil,	or Hydrology	significantly dis	turbed? Are "Norma	al Circumstances" pres	sent? Yes 🟒 No	
Are Vegetation, Soil,	or Hydrology	naturally proble	ematic? (If needed,	explain any answers i	in Remarks.)	
SUMMARY OF FINDINGS – A	Attach site map sl	howing samplin	ig point locations, tran	sects, important f	features, etc.	
Hydrophytic Vegetation Present	:? Yes _	No <u>_</u>				
Hydric Soil Present?	Yes _	No / _	Is the Sampled Area withir	າ a Wetland?	Yes No	
Wetland Hydrology Present?	Yes _	No _ _ _	If yes, optional Wetland Si	te ID:		
Remarks: (Explain alternative pr						
Wetland Hydrology Indicators: Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	· - -	Water-Stained Lea Aquatic Fauna (B1: Marl Deposits (B15 Hydrogen Sulfide (Oxidized Rhizosph Presence of Reduc	ives (B9) 3) 5) Odor (C1) ieres on Living Roots (C3) ied Iron (C4)	Surface Soil Crack Drainage Patterns Moss Trim Lines (I Dry-Season Water Crayfish Burrows	s (B10) B16) r Table (C2) (C8) e on Aerial Imagery (C9)	:d)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave	Imagery (B7)	Recent Iron Reduc Thin Muck Surface Other (Explain in R	e (C7)	Geomorphic PositShallow AquitardMicrotopographicFAC-Neutral Test ((D3) c Relief (D4)	
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave Field Observations:	Imagery (B7)	Thin Muck Surface Other (Explain in R	e (C7) Remarks)	Shallow Aquitard Microtopographic	(D3) c Relief (D4)	
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave Field Observations:	Imagery (B7) Surface (B8)	Thin Muck Surface Other (Explain in R	e (C7)	Shallow Aquitard Microtopographic	(D3) c Relief (D4)	
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave	Imagery (B7)	Thin Muck Surface Other (Explain in R	e (C7) Remarks) Tinches):	Shallow Aquitard Microtopographic	(D3) c Relief (D4) (D5)	·
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave Field Observations: Surface Water Present?	Imagery (B7) Surface (B8)	Thin Muck Surface Other (Explain in R Depth (e (C7) Remarks) Tinches):	Shallow Aquitard Microtopographic FAC-Neutral Test ((D3) c Relief (D4) (D5)	·_ -
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present?	Imagery (B7) Surface (B8) Yes No Yes No Yes No	Thin Muck Surface Other (Explain in R Depth (Depth (Depth ((C7) Remarks) inches): inches):	Shallow Aquitard Microtopographic FAC-Neutral Test ((D3) c Relief (D4) (D5)	·

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>) 1.		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:	t o	(A)
2.				Total Number of Dominant Specie	es 3	(D)
3.				Across All Strata:		(B)
4.				Percent of Dominant Species Tha	. 0	(A/B)
5.				Are OBL, FACW, or FAC:		
6.				Prevalence Index worksheet:		
7.				Total % Cover of:	<u>Multiply</u>	=
· ·		= Total Cov	er	OBL species 0	_ x 1 =	0
Sapling/Shrub Stratum (Plot size:15 ft)		-		FACW species 8	_ x 2 =	16
1. Lonicera morrowii	15	Yes	FACU	FAC species 0	_ x 3 =	0
2.		103	17100	FACU species 155	x 4 =	620
3.				UPL species 15	x 5 =	75
4.				Column Totals 178	(A)	711 (B)
5.				Prevalence Index = B/A	=4	
				Hydrophytic Vegetation Indicators	s:	
6.				1- Rapid Test for Hydrophyti	c Vegetation	า
7				2 - Dominance Test is > 50%	J	
	15	= Total Cov	er	3 - Prevalence Index is ≤ 3.0	1	
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptation	ns¹ (Provide	supporting
1. Solidago canadensis	80	Yes	FACU	data in Remarks or on a separate		11 0
2. <i>Centaurea jacea</i>	60	Yes	FACU	Problematic Hydrophytic Ve	getation¹ (E	xplain)
3. Asclepias syriaca	10	<u>No</u>	UPL	¹ Indicators of hydric soil and wetla	and hydrolo	gy must be
4. Symphyotrichum novae-angliae	8	No	FACW	present, unless disturbed or prob		
5. Fragaria vesca	5	No	UPL	Definitions of Vegetation Strata:		
6.				Tree – Woody plants 3 in. (7.6 cm)	or more in	diameter at
7.				breast height (DBH), regardless of		
8.				Sapling/shrub – Woody plants les	s than 3 in.	DBH and
9.				greater than or equal to 3.28 ft (1	m) tall.	
10.				Herb – All herbaceous (non-wood	y) plants, re	gardless of
11.				size, and woody plants less than 3	3.28 ft tall.	
12.				Woody vines – All woody vines gre	eater than 3	3.28 ft in
	163	= Total Cov	er	height.		
Woody Vine Stratum (Plot size:30 ft)		_ rotar cov	C1	Hydrophytic Vegetation Present?	Yes I	Vo <u> </u>
1.						
2				•		
3.				·		
				•		
4						
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a set No positive indication of hydrophytic vegetation was not provided in the control of the cont	•	50% of dom	inant speci	es indexed as FAC– or drier).		

Depth Matrix Redox Features Remarks		•	to the de	•			indicato	r or confirm the al	osence of indicators	5.)
0 - 12	-							- .		
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Thirespect of the concentration of the concentr				Color (moist)	%	Туре	LOC ²			Remarks
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Depleted Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (A12) Sandy Redox (A12) Dark Surface (A12) Sandy Redox (A13) Sandy Redox (A13) Sandy Redox (A13) Sandy Redox (A14) Stratified Layers (A5) Depleted Dark Surface (A13) Sandy Redox (A13) Sandy Redox (A14) Sandy Redox (A15) Depleted Dark Surface (A15) Sandy Redox (A15) Sandy Redox (A15) Depleted Dark Surface (A15) Sandy Redox (A15) Sandy Redox (A15) Depleted Dark Surface (A15) Sandy Redox (A15) Sandy Redox (A15) Sandy Redox (A15) Sandy Redox (A15) Sandy Redox (A15) Dark Surface (A16) Dark Surface (A17) Sandy Redox (A18) Sandy Redox (A19) Sandy Redox (A19) Sandy Redox (A19) Sandy Redox (A18) Sandy Redox (A19) Sandy Redox (A18) Sandy Redox (A19) Sandy Redox (A18) Sandy Redox (A19) Sandy Redox (A16) Sandy Redox (A					_					
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):	12 - 16	10YR 3/2	95	7.5YR 4/6	5		M	Clay Loar	<u>m</u>	
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):										
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):										
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):										
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):										
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Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):			· —		_					
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):		-			-					_
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Below Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Version Sills (F10) (Matrice (TF12) Popth (inches):					_					
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Histic Epipedon (A2)	Hydric Soil I	ndicators:							Indicators for Pro	blematic Hydric Soils³:
Histic Epipedon (A2)	Histosol	(A1)		Polyvalue Bel	low S	urface (S	88) (LRR	R, MLRA 149B)	2 cm Muck (A1	IO) (I RR K I MI RA 149R)
Black Histic (A3)	Histic Ep	ipedon (A2)		Thin Dark Su	rface	(S9) (LRF	R R, MLR	A 149B)		
Hydrogen Sulfide (A4)		•								
Stratified Layers (A5)	Hydroge	en Sulfide (A4)							•	
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L, R) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Depth (inches): Remarks:				Depleted Ma	trix (F3)				
— Inick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Piedmont Floodplain Soils (F19) (MLRA 149B) — Sandy Gleyed Matrix (S4) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Sandy Redox (S5) — Red Parent Material (F21) — Dark Surface (S7) (LRR R, MLRA 149B) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Type: None — Hydric Soil Present? Yes — No ✓ — Depth (inches): Remarks:									•	
Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Stripted Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks)	Thick Da	rk Surface (A12)		Depleted Dar	k Su	rface (F7))			
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Sandy M	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)				
Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No✓. Depth (inches): Remarks:	Sandy G	leved Matrix (S4)								
Stripped Matrix (S6) Ned Parent Material (P21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks)	-									
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No✓ Depth (inches): Remarks:	_									
3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks:			AL DA 140)D)					Very Shallow [Dark Surface (TF12)
Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil Present? Yes No _ ✓	Dark Su	rrace (57) (LKK K, N	ILKA 145	9B)					Other (Explain	in Remarks)
Type: None Hydric Soil Present? Yes No ✓ Depth (inches): Remarks:	3Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must b	e preser	it, unless disturbe	d or problematic.	
Depth (inches): Remarks:	Restrictive L	ayer (if observed):								
Remarks:		Type:		None			Hydric	Soil Present?	Yes	No/_
Remarks:					•		1			
	-	<i>2</i> cp c (ee).							•	
	No positive	indication of hydri	c soils w	as observed. The	e crite	erion for	hydric s	oil is not met. Refu	isal due to coarse f	ragments.

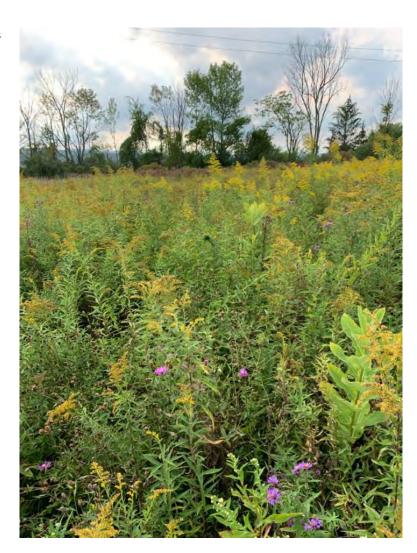






Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot West



at Creek Solar Project City/C	ounty: Sprakers, Montgomery County	Sampling Date: 2021-Sept-14				
er: SunEast	State: NY	Sampling Point: W-JMP-23_UPL-2				
Jerry Peake, Steve Spotts, Abi Light	Section, Township,	Range: NA				
ope, terrace, etc.): Terrace	Local relief (concave, conv	ex, none): Convex	Slope (%): 2 to 5			
or MLRA): LRR L	Lat: 42.846607496	8 Long: -74.4888833995	Datum: WGS84			
ame: Burdett channery silt loam, BuB		NWI classification:	None			
drologic conditions on the site typical for th	s time of year? Yes No	(If no, explain in Remarks.)				
, Soil, or Hydrology sig	nificantly disturbed? Are "Norm	al Circumstances" present?	es 🟒 No			
, Soil, or Hydrology na	urally problematic? (If needed,	explain any answers in Remarks.)				
F FINDINGS – Attach site map show	ng sampling point locations, trai	nsects, important features, et	C.			
egetation Present? Yes 🟒 No	'					
sent? Yes N	Is the Sampled Area with	in a Wetland? Yes _	No <u>_</u> _			
ology Present? Yes No	If yes, optional Wetland S	Site ID:				
Table (A2) Aqua (A3) Marl vs (B1) Hydro Deposits (B2) Oxidi viits (B3) Prese	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) nce of Reduced Iron (C4)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)				
	t Iron Reduction in Tilled Soils (C6) Nuck Surface (C7)	Geomorphic Position (D2)				
· ·	(Explain in Remarks)	Shallow Aquitard (D3)				
getated Concave Surface (B8)	(2Aprail III Nellialite)	Microtopographic Relief (D4)				
		FAC-Neutral Test (D5)				
ions:						
Present? Yes No	Depth (inches):	-				
esent? Yes No	Depth (inches):	Wetland Hydrology Present?	Yes No			
sent? Yes No	Depth (inches):	_				
ary fringe)						
or wetland hydrology is not met. No positiv						

	Ahsoluta	Dominant	Indicator	Dominance Test worksheet:				
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Species?	Status	Number of Dominant Species	That			
1.				Are OBL, FACW, or FAC:	2	(A)		
2.				Total Number of Dominant Sp	ecies			
3.				Across All Strata:	3	(B)		
4.				Percent of Dominant Species	That 66.7	(A (D)		
				Are OBL, FACW, or FAC:	66.7	(A/B)		
5.				Prevalence Index worksheet:				
6				Total % Cover of:	<u>Multiply</u>	Ву:		
7				OBL species 0	x 1 =	0		
	0	= Total Cov	er	FACW species 55	x 2 =	110		
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species 40	x 3 =	120		
1. Rhamnus cathartica	40	Yes	FAC	FACU species 105	x 4 =	420		
2. Elaeagnus umbellata	10	No	NI	- UPL species 0	x 5 =	0		
3. Lonicera morrowii	10	No	FACU	- Column Totals 200		650 (B)		
4. <i>Cornus amomum</i>	5	No	FACW	Prevalence Index = E		030 (B)		
5								
5				Hydrophytic Vegetation Indica				
7.				1- Rapid Test for Hydrop		1		
	65	= Total Cov	er	2 - Dominance Test is >5				
Herb Stratum (Plot size: <u>5 ft</u>)		_		3 - Prevalence Index is ≤				
1. Solidago canadensis	85	Yes	FACU	4 - Morphological Adapta		supporting		
2. Phalaris arundinacea	50	Yes	FACW	data in Remarks or on a separ		(ماندامان		
3. <i>Centaurea jacea</i>	10	No	FACU	- Problematic Hydrophytic Vegetation¹ (Explain) - ¹Indicators of hydric soil and wetland hydrology must be				
4.				rindicators of nydric soil and wetland hydrology must be present, unless disturbed or problematic				
				· · · · · · · · · · · · · · · · · · ·				
6.				Definitions of Vegetation Strat				
7.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
				Sapling/shrub – Woody plants less than 3 in. DBH and				
3. 9.				greater than or equal to 3.28 ft (1 m) tall.				
				Herb – All herbaceous (non-woody) plants, regardless o				
10				size, and woody plants less than 3.28 ft tall.				
11				Woody vines – All woody vines greater than 3.28 ft in				
12				height.				
	145	= Total Cov	er	Hydrophytic Vegetation Prese	nt? Voc. / N	vio.		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Trydrophytic vegetation Frese	:iit: 165 <u>/</u> 1	NO		
l				-				
2				-				
3								
4				_				
	0	= Total Cov	er					

Profile Desc	ription: (Describe to	o the d	epth needed to o			indicator o	r confirm the a	bsence of indicator	s.)			
(inches)	Color (moist)	<u></u> %	Color (moist)	%	Type ¹	L oc²	Touturo		Domonilia		-	
0 - 18	10YR 3/3	95	7.5YR 5/6	- 90 5	С	Loc ² M	Texture Silty Clay Loam		Remarks		<u> </u>	
0-16	1011 3/3	93	7.51K 5/0			IVI	Silty Clay Loam					
						. —— –					-	
						. —— –					-	
		· — ·				· -						
		. — .				· -						
		. <u> </u>				. —— –						
				_								
						. <u> </u>						
						. <u> </u>						
¹Type: C = C	oncentration, D = D	Depletio	on, RM = Reduced	d Matı	rix, MS =	Masked S	and Grains. ² L	ocation: PL = Pore l	ining,	M = Matrix.		
Hydric Soil	ndicators:							Indicators for Pro	blema	tic Hydric Soils ³	:	
Histosol			Polyvalue Be	low S	urface (S	58) (LRR R,	MLRA 149B)	2 cm Muck (A	10) (LR	R K, L, MLRA 14	9B)	
Histic Ep	oipedon (A2)		Thin Dark Su	ırface	(S9) (LRF	R R, MLRA	149B)	Coast Prairie				
Black Hi			Loamy Muck			(LRR K, L)		5 cm Mucky P				
	en Sulfide (A4)		Loamy Gleye					Dark Surface				
	d Layers (A5)		Depleted Ma					Polyvalue Bel	ow Sur	face (S8) (LRR K	(, L)	
	d Below Dark Surfa	ce (A11				`		Thin Dark Sur	Surface (S9) (LRR K, L)			
	ark Surface (A12) lucky Mineral (S1)		Depleted Da Redox Depre)		Iron-Mangane	ese Ma	sses (F12) (LRR	K, L, R)	
			Redox Depre	222101	15 (F6)			Piedmont Flo	odplair	n Soils (F19) (ML	-RA 149B)	
-	lleyed Matrix (S4)							Mesic Spodic	(TA6) (I	MLRA 144A, 145	5, 149B)	
_	edox (S5)							Red Parent M	aterial	(F21)		
	Matrix (S6)		on;					Very Shallow	Dark Sເ	urface (TF12)		
Dark Su	rface (S7) (LRR R, M	LKA 14	9B)					Other (Explain	n in Rer	marks)		
3Indicators	of hydrophytic vege	etation	and wetland hyd	rolog	y must b	e present,	unless disturbe	d or problematic.				
Restrictive I	ayer (if observed):		-					-				
	Type:		None			Hydric So	oil Present?	,	Yes	_ No _∠		
	Depth (inches):			_								
Remarks:						II.		 ,				
	indication of hydric	soils v	vas observed. Th	e crite	erion for	hydric soil	is not met.					



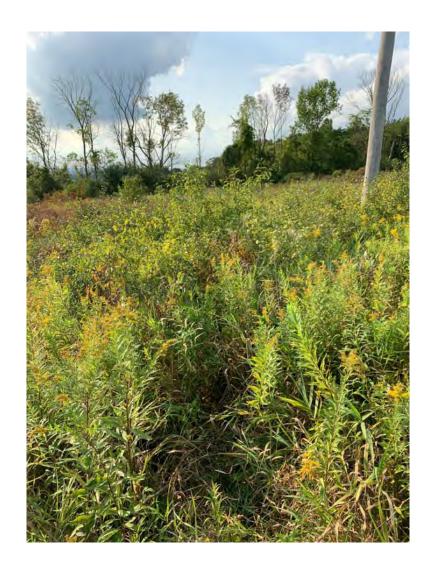




Photo of Sample Plot North



Photo of Sample Plot West

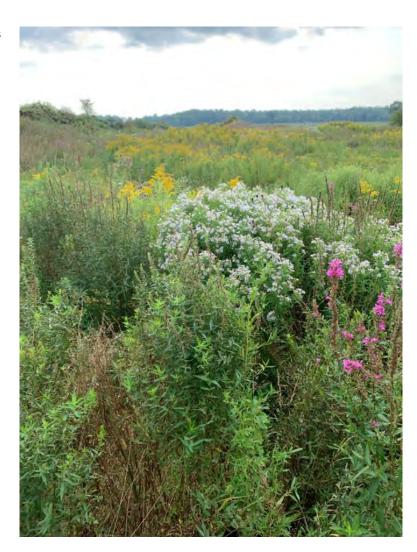


Project/Site: Flat Creek Solar Pro	oject	City/County: Sprak	ers, Montgomery County	,	Sampling Date: 202	21-Sept-15
Applicant/Owner: SunEast			State: NY		Sampling Point: W-JM	IP-24_PEM-1
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Ligh	nt	Section, Township,	Range: NA	·	
Landform (hillslope, terrace, etc.)	: Terrace	L	 ocal relief (concave, conv	ex, none):	Concave	Slope (%): 2 to 5
Subregion (LRR or MLRA):L	RR L	-	Lat: 42.844528165	8 Long:	-74.4888890662	Datum: WGS84
Soil Map Unit Name: Darien si	ilt loam, DaB				NWI classification	n: None
Are climatic/hydrologic condition	s on the site typica	al for this time of year	? Yes <u></u> ✓ No	(If no,	explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology _	significantly dist	urbed? Are "Norm	al Circumsta	ances" present?	Yes No
Are Vegetation, Soil,	or Hydrology _	naturally proble	matic? (If needed,	explain any	answers in Remarks.)
SUMMARY OF FINDINGS – A	Attach site map	showing sampling	g point locations, trar	nsects, im	portant features, e	etc.
Hydrophytic Vegetation Present	? Yes _	✓_ No				
Hydric Soil Present?	Yes _	✓ No I	s the Sampled Area withi	n a Wetland	d? Yes	No
Wetland Hydrology Present?	Yes _	.∠ No	f yes, optional Wetland Si	ite ID:	W-IN	ЛР-24
Remarks: (Explain alternative pro	······································		, , ,			···
Covertype is PEM. Area is wetlar	nd, all three wetlan	d parameters are pre	esent.			
HYDROLOGY						
Wotland Hudrology Indicators						
Wetland Hydrology Indicators:		1 11/1 / 13				
Primary Indicators (minimum of	one is required; cl	neck all that apply)		-	Indicators (minimum	of two required)
Surface Water (A1)		_ Water-Stained Leav	es (B9)		Soil Cracks (B6)	
High Water Table (A2)	_	_ _ Aquatic Fauna (B13)		,	ge Patterns (B10)	
✓ Saturation (A3)	_	_ Marl Deposits (B15)			rim Lines (B16)	
Water Marks (B1)		_ Hydrogen Sulfide O		-	ason Water Table (C2)	
Sediment Deposits (B2)			res on Living Roots (C3)	-	h Burrows (C8)	
Drift Deposits (B3)		_ Presence of Reduce	_		ion Visible on Aerial Ir	
Algal Mat or Crust (B4)	_		on in Tilled Soils (C6)		d or Stressed Plants (D	01)
Iron Deposits (B5)		_ Thin Muck Surface (Geomo	rphic Position (D2)	
Inundation Visible on Aerial I		_ Other (Explain in Re		Shallow	v Aquitard (D3)	
		_ Otrier (Explain in Re	IIIdIKS)	_✓ Microto	pographic Relief (D4)	
Sparsely Vegetated Concave	Surface (Bo)			∕ FAC-Ne	utral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No	∠ Depth (i	nches):			
Water Table Present?	Yes 🟒 No _	Depth (i	nches): 4	Wetland H	ydrology Present?	Yes No
Saturation Present?	Yes 🟒 No _	Depth (i	nches): 4			
(includes capillary fringe)				-		
Describe Recorded Data (stream	n gauge monitorin	g well perial photos	nravious inspactions) if:	availahla.		
Describe Recorded Data (stream	r gauge, monitorin	g well, aeriai priotos,	previous irispections), ir o	avallable.		
Remarks:						
The criterion for wetland hydrol	ogy is met A nosit	ive indication of wetla	and hydrology was obser	ved (nrimar	v and secondary indic	estors were present)
The chiefforf for Wetland Hydron	ogy is filet. A posit	ive indication of wells	and nydrology was obser	veu (primar	y and secondary much	ators were present).

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test work Number of Dominant Are OBL, FACW, or FA	Species That	3	(A)
1				Total Number of Dom			
2				Across All Strata:	mant species	3	(B)
3.				Percent of Dominant	Species That		
4				Are OBL, FACW, or FA	•	100	(A/B)
5				Prevalence Index wor	ksheet:		
6				Total % Cove	<u>r of:</u>	<u>Multiply</u>	<u>By:</u>
7				OBL species	85	x 1 =	85
	0	= Total Cove	er	FACW species	45	x 2 =	90
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	55	x 3 =	165
1.				FACU species	10	x 4 =	40
2				UPL species	0	x 5 =	0
3				Column Totals	195	(A)	380 (B)
4				Prevalence	Index = B/A =	1.9	
5				Hydrophytic Vegetation	n Indicators:		
6.				1- Rapid Test for		/egetatior	1
7				2 - Dominance T		Ü	
	0	= Total Cove	er	✓ 3 - Prevalence In	dex is ≤ 3.01		
Herb Stratum (Plot size: <u>5 ft</u>)	0.5	.,	0.01	4 - Morphologica	al Adaptations	¹ (Provide	supporting
1. Lythrum salicaria	85	Yes	OBL	data in Remarks or or	n a separate sh	neet)	
2. Symphyotrichum lanceolatum	25	Yes	FACW	Problematic Hyd	Irophytic Vege	tation¹ (Ex	(plain)
3. Juncus tenuis	25	Yes	FAC	¹Indicators of hydric s	oil and wetlan	d hydrolo	gy must be
4. Impatiens capensis		No _	FACW	present, unless distur	bed or proble	matic	
5. Euthamia graminifolia	20	No _	FAC	Definitions of Vegetat	ion Strata:		
6. Plantago rugelii	10	No _	FAC	Tree – Woody plants 3			diameter at
7. Melilotus indicus	10	No	FACU	breast height (DBH), r	_	-	
8				Sapling/shrub - Wood			DBH and
9				greater than or equal			C
10				Herb – All herbaceous size, and woody plant			gardiess of
11				Woody vines - All woo			28 ft in
12				height.	ody viries grea	ter triair 5	.2011111
	195	= Total Cove	er		Dunnant2 \	/ / N	1-
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetati	on Present?	res r	10
1							
2							
3							
4							
	0	= Total Cove	er				

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

	•	to the	•			indicato	r or confirm the a	bsence of indicators.)
Depth	Matrix	06	Redox			1002	Texture	Domarks
(inches) 0 - 6	Color (moist) 10YR 2/2	<u>%</u> 98	Color (moist) 10YR 4/6	<u>%</u> 2	Type¹ C	Loc ²	Silty Clay Loam	Remarks
6 - 15	10YR 5/3	80	7.5YR 4/6	20		M		-
0-13	1018 3/3		7.318 4/0				Silty Clay Loam	Some graver within line 2, suspected hin
				_				
		- —						
		- —		_				
				_		_		
	Concentration, D = I	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil						==		Indicators for Problematic Hydric Soils ³ :
Black H Hydrog Stratifie Deplete Thick D Sandy N Sandy C Sandy F Dark Su	I (A1) pipedon (A2) istic (A3) en Sulfide (A4) ed Layers (A5) ed Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic veg	ILRA 1	Thin Dark Si Loamy Muci Loamy Gley Depleted M 1) Redox Dark Depleted Da Redox Depr	urface ky Mir ed Ma atrix (I Surfa ark Su essior	(S9) (LRI leral (F1) trix (F2) F3) ce (F6) rface (F7 ns (F8)	R R, MLR (LRR K,	.)	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) 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	Layer (if observed):							
	Type:		None	•		Hydric	Soil Present?	Yes No
	Depth (inches):							
Remarks: A positive i	ndication of hydric	soil wa	as observed. The	criterio	on for hy	rdric soil	is met.	



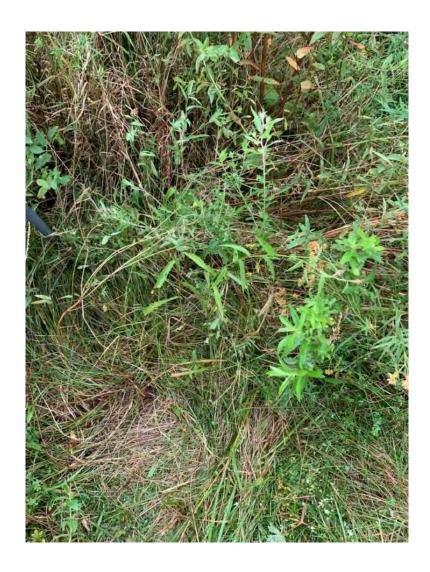




Photo of Sample Plot North



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	akers, Montgomery County	Sampling Dat	e: 2021-Sept-15
Applicant/Owner: SunEast			State: NY	Sampling Point:	W-JMP-24_UPL-1
Investigator(s):Jerry Peake, Sto	eve Spotts, Abi Ligh	t	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.)	: Terrace		Local relief (concave, conv	rex, none): None	Slope (%): 2 to 5
Subregion (LRR or MLRA):	.RR L		Lat: 42.844544764	4 Long: -74.489073676	Datum: WGS84
Soil Map Unit Name: Darien si	lt loam, DaB			NWI classi	fication: None
Are climatic/hydrologic condition	s on the site typica	l for this time of ye	ear? Yes <u>✓</u> No	(If no, explain in Rem	arks.)
Are Vegetation, Soil,	or Hydrology _	significantly di	sturbed? Are "Norm	al Circumstances" present?	Yes 🔽 No
Are Vegetation, Soil,	or Hydrology _	naturally prob	lematic? (If needed,	explain any answers in Re	marks.)
SUMMARY OF FINDINGS – A	Attach site map	showing sampli	ng point locations, trai	nsects, important featu	ıres, etc.
Hydrophytic Vegetation Present	? Yes	No <u>_</u>			
Hydric Soil Present?	Yes	No <u>_</u>	Is the Sampled Area withi	n a Wetland?	Yes No/_
Wetland Hydrology Present?		No _ _ _	If yes, optional Wetland S	ite ID:	
Remarks: (Explain alternative pr				ite ib.	<u> </u>
HYDROLOGY Wetland Hydrology Indicators:					
Primary Indicators (minimum of	one is required: ch	neck all that apply)		Secondary Indicators (mir	nimum of two required)
•	•			Surface Soil Cracks (B6	•
Surface Water (A1)		_ Water-Stained Lea		Drainage Patterns (B1	•
High Water Table (A2)		_ Aquatic Fauna (B1		Moss Trim Lines (B16)	
Saturation (A3) Water Marks (B1)		_ Marl Deposits (B1 _ Hydrogen Sulfide		Dry-Season Water Tab	le (C2)
Sediment Deposits (B2)			heres on Living Roots (C3)	Crayfish Burrows (C8)	
Drift Deposits (B3)	_	Presence of Redu	_	Saturation Visible on A	
Algal Mat or Crust (B4)	_	_ Recent Iron Redu	ction in Tilled Soils (C6)	Stunted or Stressed Pl	
Iron Deposits (B5)	_	_ Thin Muck Surfac		Geomorphic Position (Shallow Aquitard (D3)	D2)
Inundation Visible on Aerial		Other (Explain in	Remarks)	Microtopographic Reli	ef (D4)
Sparsely Vegetated Concave	Surface (B8)			FAC-Neutral Test (D5)	c. (<i>z</i> .)
Field Observations:					
Surface Water Present?	Yes No _	✓ Depth	(inches):		
Water Table Present?	Yes No _	<u>✓</u> Depth	(inches):	Wetland Hydrology Prese	nt? Yes No
Saturation Present?	Yes No _		(inches):	-	
(includes capillary fringe)				-	
Describe Recorded Data (stream	a gauga manitaring	zwall zarial photo	c provious inspections) if		
Remarks: The criterion for wetland hydrol	ogy is not met. No	positive indication	of wetland hydrology was	bbserved.	

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant		Dominance Test works			
1.	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC		0	(A)
2.				Total Number of Domir	nant Species	1	(B)
B				Percent of Dominant S	necies That		
l				- Are OBL, FACW, or FAC:		0	(A/B)
j				Prevalence Index works			
·				Total % Cover	of:	Multiply	By:
·				- OBL species	0	x 1 =	0
	0	= Total Cove	er	FACW species	0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	20	x 3 =	60
·				- FACU species	120	x 4 =	480
				- UPL species	0	x 5 =	0
•				- Column Totals	140	(A)	540 (B)
·				- Prevalence Ir	idex = B/A =	3.9	
				Hydrophytic Vegetation	Indicators:		
·				1- Rapid Test for H		/egetatior	1
				2 - Dominance Te	, ,	0	
	0	= Total Cove	er	3 - Prevalence Ind			
erb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological		¹ (Provide	supportin
. Lolium perenne	100	Yes	FACU	data in Remarks or on			• •
Euthamia graminifolia		<u>No</u>	FAC	Problematic Hydr	ophytic Vege	tation¹ (Ex	kplain)
. Centaurea jacea	10	<u>No</u>	FACU	Indicators of hydric so	il and wetlan	d hydrolo	gy must b
. Galium mollugo		<u>No</u>	FACU	present, unless disturb	ed or problei	matic	
•				Definitions of Vegetation	n Strata:		
				Tree – Woody plants 3 i			diameter a
·				breast height (DBH), re	_	_	
·				Sapling/shrub - Woody			DBH and
•				greater than or equal to			
0				Herb – All herbaceous (size, and woody plants			gardiess o
1				Woody vines – All wood			28 ft in
2				height.	ly villes great	ter triair 5	.2010111
	140	= Total Cove	er	Hydrophytic Vegetatio	- Dunnam#7 \	/ N	
Voody Vine Stratum (Plot size: <u>30 ft</u>)				nyuropriyuc vegetatio	ii Present?	res r	NO <u>7</u>
•				_			
•				=			
·				_			
·				_			
	0	= Total Cove	er				

	•	to the de	•			ndicator	or confirm the al	bsence of indicators	.)		
Depth _	Matrix		Redox			12	Taud			Dama	ula
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Text			Rema	rks
0 - 9	10YR 3/2	100	2 5 10 4 6	_			Silty Cla				-
9 - 20	10YR 3/3	95	2.5YR 4/6	5	C	<u>M</u>	Silty Cla	y Loam			
		· —		_							
				_							
				_							
				_							
-											
-											
-											
¹Type: C = C	oncentration, D = I	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Li	ning, l	M = Matrix.	
Hydric Soil		<u> </u>	,		<u> </u>			Indicators for Prob			ls³:
Histosol			Polvvalue Bel	ow S	urface (S	8) (LRR I	R, MLRA 149B)			-	
	pipedon (A2)		Thin Dark Su					2 cm Muck (A1			
Black Hi			Loamy Mucky					Coast Prairie R			
	en Sulfide (A4)		Loamy Gleye				•	5 cm Mucky Pe			K K, L, K)
	d Layers (A5)		Depleted Ma	trix (l	- 3)			Dark Surface (Polyvalue Belo			ארוא
Deplete	d Below Dark Surfa	ace (A11)	Redox Dark S	urfa	ce (F6)			Thin Dark Surf			(I, L)
Thick Da	ark Surface (A12)		Depleted Dar					Iron-Mangane			DD K I DI
Sandy M	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			Piedmont Floo			
Sandy G	ileyed Matrix (S4)							Mesic Spodic (
Sandy R	edox (S5)							Red Parent Ma			45, 1450)
Stripped	Matrix (S6)							Very Shallow D			
Dark Su	rface (S7) (LRR R, N	ILRA 149	9B)					Other (Explain			
								•	III KEI	iiai ks)	
-	of hydrophytic veg		and wetland hydr	olog	y must be	e presen	t, unless disturbe	d or problematic.			
Restrictive I	.ayer (if observed):										
	Туре:		None			Hydric	Soil Present?	Y	es	_ No ∠ _	
	Depth (inches):							·			
Remarks:											
No positive	indication of hydri	c soils w	as observed. The	crite	erion for l	hydric so	oil is not met.				





Photo of Sample Plot North



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	akers, Montgomery Coun	ty	Sampling Date: 202	21-Sept-15
Applicant/Owner: SunEast			State: N	<u>Y</u> :	Sampling Point: W-JM	1P-25_PEM-1
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Ligh	nt	Section, Township	p, Range: NA	4	
Landform (hillslope, terrace, etc.)): Flat		Local relief (concave, cor	nvex, none):_	Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA):	.RR L		Lat: 42.859489	Long:	-74.518796	Datum: WGS84
Soil Map Unit Name: Ilion silt l	oam,IIA				NWI classification	n: R2UB
Are climatic/hydrologic condition	s on the site typica	l for this time of ye	ear? Yes <u>✓</u> N	lo (If no	, explain in Remarks.)	
Are Vegetation, Soil,		significantly di		mal Circumst	ances" present?	Yes No
Are Vegetation, Soil,	or Hydrology _	naturally prob	lematic? (If needed	d, explain any	y answers in Remarks.	.)
SUMMARY OF FINDINGS – A	Attach site map	showing sampli	ng point locations, tra	ansects, im	portant features,	etc.
Hydrophytic Vegetation Present		✓_ No			<u> </u>	
Hydric Soil Present?		✓ No	Is the Sampled Area with	hin a Watlan	d2 Vos	/ No
			†			No
Wetland Hydrology Present?	Yes	✓ No	If yes, optional Wetland	Site ID:	<u>W-JN</u>	MP-25
Remarks: (Explain alternative pro-	ocedures here or i	n a separate report)			
•						
Covertype is PEM. Area is wetlar	າd, all three wetlan	d parameters are p	resent.			
31	.,					
ANDBOI OCA						
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required: ch	neck all that apply)		Secondary	/ Indicators (minimum	of two required)
<u> </u>	<u> </u>	recircum criac app.y.		=		<u> </u>
Surface Water (A1)		_ Water-Stained Lea	aves (89)	Surface	e Soil Cracks (B6)	
				Draina	ge Patterns (B10)	
High Water Table (A2)		_ Aquatic Fauna (B1		Moss T	rim Lines (B16)	
✓ Saturation (A3)		_ Marl Deposits (B1		Dry-Se	ason Water Table (C2)	
Water Marks (B1)	_	_ Hydrogen Sulfide		Cravfis	sh Burrows (C8)	
Sediment Deposits (B2)	_	_ Oxidized Rhizospl	neres on Living Roots (C3)	1	tion Visible on Aerial Ir	magary (C9)
Drift Deposits (B3)	_	_ Presence of Redu	ced Iron (C4)			
Algal Mat or Crust (B4)	_	Recent Iron Redu	ction in Tilled Soils (C6)		d or Stressed Plants (D	(۱ر
Iron Deposits (B5)		_ _ Thin Muck Surfac			orphic Position (D2)	
Inundation Visible on Aerial I	magery (B7)	_ Other (Explain in I		Shallov	w Aquitard (D3)	
		_ Other (Explain in i	Kemarks)	Microto	opographic Relief (D4))
Sparsely Vegetated Concave	Surface (B8)				eutral Test (D5)	
					atrar lest (D3)	
Field Observations:						
Surface Water Present?	Yes No	∠ Depth	(inches):	_		
Water Table Present?	Yes 🟒 No	Depth	(inches): 18	Wetland H	lydrology Present?	Yes No
Saturation Present?	Yes _ 🗸 No		(inches): 0			
	165110	Берин	(11101103).	_		
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge monitorin	a well serial nhata	e pravious inspactions) i	f available.		
Describe Recorded Data (stream	i gauge, monitoring	g well, acrial prioto	s, previous irispections,, i	i available.		
-						
Remarks:						
The construction of the colored	t		Alamada Inggalaran ayan ayan a		and the second s	
The criterion for wetland hydrol	ogy ıs met. A positi	ve indication of we	tiand nydrology was obse	erved (primar	ry and secondary indic	cators were present).
•	•				-	

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Number of Dominant Are OBL, FACW, or FA	Species That	1	(A)
1.				Total Number of Dom			
2				Across All Strata:	illiant species	1	(B)
3.				Percent of Dominant	Species That		
4				Are OBL, FACW, or FA	C:	100	(A/B)
5				Prevalence Index wor	ksheet:		
6.				Total % Cove	<u>er of:</u>	<u>Multiply</u>	<u>Ву:</u>
7				- OBL species	40	x 1 =	40
6 1: 451 1 6: 4 451 1 456)	0	= Total Cove	er	FACW species	100	x 2 =	200
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	0	x 3 =	0
1.				FACU species	0	x 4 =	0
2.				- UPL species	0	x 5 =	0
3.				- Column Totals	140	(A)	240 (B)
4				- Prevalence	Index = B/A =	1.7	
5				Hydrophytic Vegetation	on Indicators:	•	·
6.				1- Rapid Test for		/egetation	ı
7				2 - Dominance T		Ü	
	0	= Total Cove	er	✓ 3 - Prevalence Ir			
Herb Stratum (Plot size: <u>5 ft</u>)	100		E4 6147	4 - Morphologic	al Adaptations	¹ (Provide	supporting
1. Phalaris arundinacea	100	Yes	FACW	data in Remarks or or	n a separate sh	neet)	
2. Symphyotrichum puniceum	20	No	OBL	- Problematic Hyd	drophytic Vege	tation¹ (Ex	(plain)
3. Lythrum salicaria	15	No	OBL	Indicators of hydric s	oil and wetlan	d hydrolo	gy must be
4. Typha latifolia	5	No	OBL	present, unless distur	bed or proble	matic	
5				Definitions of Vegetat	ion Strata:		
6				Tree – Woody plants 3			diameter at
7				breast height (DBH), r	•	-	
8				Sapling/shrub - Wood			DBH and
9				greater than or equal			
10				Herb – All herbaceous			gardiess of
11				Woody vines – All wo			28 ft in
12				height.	ody viries grea	ter triair 5.	.20 11 111
	140	= Total Cove	er		ian Duananti \	/ / `	l =
Woody Vine Stratum (Plot size: 30 ft)				Hydrophytic Vegetat	ion Present? \	res 🔽 N	10
1				_			
2				.			
3				_			
4							
	0	= Total Cove	er				

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

	cription: (Describe	to the c				ndicator	or confirm the a	bsence of indicato	ors.)
Depth	Matrix		Redox	(Feat	ures				
(inches)	Color (moist)	%_	Color (moist)	%	Type ¹	Loc ²	Text	ure	Remarks
0 - 4	10YR 2/2	100					Silt L	oam	
4 - 12	10YR 3/1	90	10YR 4/6	10	C	M	Silty Cla	y Loam	
12 - 20	10YR 3/1	85	5YR 4/6	15	С	M	Silty Cla	y Loam	
								_	
-									
								_	
				_					
								_	
¹Type: C =	Concentration, D =	Depleti	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pi	roblematic Hydric Soils³:
Histoso	l (A1)		Polyvalue Be	low S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLR	A 149B)		e Redox (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L	.)		Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surface	
	ed Layers (A5)		Depleted Ma						elow Surface (S8) (LRR K, L)
	ed Below Dark Surf	ace (A1							urface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da						nese Masses (F12) (LRR K, L, R)
_	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)			_	oodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)								c (TA6) (MLRA 144A, 145, 149B)
Sandy I	Redox (S5)							Red Parent I	
Strippe	d Matrix (S6)								v Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, I	VILRA 14	19B)					Other (Expla	
3Indicators	of hydrophytic veg	etation	and wetland hvd	rolog	v must be	e presen	t. unless disturbe	•	
	Layer (if observed)				,		-,		-
Reserve	Type:	•	None			Hydric	Soil Present?		Yes No
	Depth (inches):		None			liyanc	John resent:		163 <u>7</u> NO
D	Deptil (iliches).								
Remarks:									
A positive i	ndication of hydric	soil wa	s observed. The c	riterio	on for hyd	dric soil	s met.		
]									
]									
L									







Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	akers, Montgomery County	,	Sampling Date: 20	21-Sept-15
Applicant/Owner: SunEast		<u> </u>	State: NY		Sampling Point: W-JN	1P-25_PSS-1
Investigator(s): Jerry Peake, St	eve Spotts, Abi L	ght	Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.)): Flat		Local relief (concave, conv	/ex, none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA): L	.RR L	_	Lat: 42.859070268	S5 Long:	-74.5168342797	Datum: WGS84
Soil Map Unit Name: Ilion silt	loam, IIA		,		NWI classificatio	n: R2UB
Are climatic/hydrologic condition	s on the site typ	ical for this time of ye	ar? Yes No	(If no,	, explain in Remarks.)	
Are Vegetation, Soil,	or Hydrolog	y significantly di	sturbed? Are "Norm	al Circumsta	ances" present?	Yes No
Are Vegetation, Soil,	or Hydrolog	y naturally prob	ematic? (If needed,	explain any	answers in Remarks	.)
SUMMARY OF FINDINGS – A	Attach site ma	p showing sampli	ng point locations, trai	nsects, im	portant features,	etc.
Hydrophytic Vegetation Present	? Ye	s No				
Hydric Soil Present?		sNo	Is the Sampled Area withi	in a Watland	12 Voc	No
			†			
Wetland Hydrology Present?	· · · · · · · · · · · · · · · · · · ·	SNo	If yes, optional Wetland S	ite ID:	W-JI	MP-25
Remarks: (Explain alternative pr						
Covertype is PSS. Area is wetlan	d, all three wetla	nd parameters are pr	resent.			
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required:	check all that apply)		Secondary	Indicators (minimum	of two required)
		and apply		-	Soil Cracks (B6)	.
Surface Water (A1)		Water-Stained Lea			ge Patterns (B10)	
High Water Table (A2)		Aquatic Fauna (B1		,	rim Lines (B16)	
Saturation (A3)		Marl Deposits (B1			ason Water Table (C2)	
Water Marks (B1)		Hydrogen Sulfide		Crayfisl	h Burrows (C8)	
Sediment Deposits (B2)		· ·	neres on Living Roots (C3)	Saturat	ion Visible on Aerial I	magery (C9)
Drift Deposits (B3)		Presence of Redu		Stunted	d or Stressed Plants (I	D1)
Algal Mat or Crust (B4)			ction in Tilled Soils (C6)	_ ∠ Geomo	rphic Position (D2)	
Iron Deposits (B5)	Imagan (D7)	Thin Muck Surface		Shallow	v Aquitard (D3)	
Inundation Visible on Aerial		Other (Explain in I	Remarks)	Microto	pographic Relief (D4))
Sparsely Vegetated Concave	Surface (Bo)			<u></u> FAC-Ne	utral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No	Depth	(inches):	_		
Water Table Present?	Yes 🟒 No	Depth	(inches): 10	Wetland H	ydrology Present?	Yes No
Saturation Present?	Yes No	✓ Depth	(inches):			
(includes capillary fringe)		'	· · · —	-		
Describe Recorded Data (stream	a gauga manitar	ing wall parial photo	s provious inspections) if	available:		
Describe Recorded Data (stream	r gauge, monitor	ing weil, aeriai prioto	s, previous irispections), ir	avallable.		
Remarks:						
The criterion for wetland hydrol	ogy is met. A pos	sitive indication of we	tland hydrology was obser	ved (at leas	t two secondary indic	ators).
1						

Tree Stratum (Plot size:30 ft)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant S			
1.	% Cover	3pecies:	Status	Are OBL, FACW, or FAC		3	(A)
2.				Total Number of Domi			
3.				Across All Strata:	·	4	(B)
4.				Percent of Dominant S Are OBL, FACW, or FAC	•	75	(A/B)
5				Prevalence Index work			
6				Total % Cover		Multiply	Bv.
7				OBL species	0	x 1 =	_
	0	= Total Cov	er	FACW species	160	x 2 =	320
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	30	x 3 =	90
1. <i>Cornus amomum</i>	40	Yes	FACW	FACU species	30	x 4 =	120
2. <i>Salix alba</i>	30	Yes	FACW	UPL species	0	x5=	0
3. <i>Viburnum lentago</i>	10	No	FAC	Column Totals	220	(A)	530 (B)
4.				Prevalence In		2.4	330 (B)
5.				-			
6.				Hydrophytic Vegetation			
7.				1- Rapid Test for I		egetation/	1
	80	= Total Cov	er	✓ 2 - Dominance Te			
Herb Stratum (Plot size: <u>5 ft</u>)		-		3 - Prevalence Inc			
1. <i>Impatiens capensis</i>	50	Yes	FACW	4 - Morphological		-	supporting
2. Solidago canadensis	30	Yes	FACU	data in Remarks or on Problematic Hydi	•	-	volaio)
3. <i>Amphicarpaea bracteata</i>	20	No	FAC	¹Indicators of hydric so			-
4. <i>Onoclea sensibilis</i>	20	No	FACW	present, unless disturb		-	gy must be
5. Symphyotrichum lanceolatum	10	No	FACW	Definitions of Vegetation	· '		
6. <i>Poa palustris</i>	10	No	FACW	Tree – Woody plants 3		more in	diameter at
7.				breast height (DBH), re			
8.				Sapling/shrub - Woody	-	_	DBH and
9.				greater than or equal t			
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 grea	ter than 3	.28 ft in
	140	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: <u>30 ft</u>)		Total Cov	C.	Hydrophytic Vegetation	on Present? \	/es <u> </u>	No
1							
1. 2.				•			
3.				•			
3				•			
4		Tatal					
	0	= Total Cov	eı				

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).

Profile Desc Depth	cription: (Describe Matrix	to the de	epth needed to de			ndicato	or confirm the a	absence of indicato	ors.)
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Text	ture	Remarks
0 - 8	10YR 3/1	100	Color (moist)	- 70	Турс		Silty Cla		Remarks
8 - 20	10YR 3/1	97	10YR 4/6	3			Silty Cla		_
				<u> </u>				.,	_
				_					
-				_					
				_					
-				_					
				_					
_				_			-		
-				_					
_				_			-		
				_				· ·	_
¹Type: C = C	Concentration, D =	 Depletio	n. RM = Reduced	— Matr	ix. MS =	Masked	Sand Grains 2	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil		Веріско	TI, IIII	wide	17, 1113	Masica	Sana Granis.		roblematic Hydric Soils³:
Histosol			Polyvalue Bel	ow S	urface (S	8) (I RR I	R. MI RA 149B)		•
	oipedon (A2)		Thin Dark Sui						A10) (LRR K, L, MLRA 149B)
Black Hi	•		Loamy Mucky				=		e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface	
Stratifie	d Layers (A5)		Depleted Ma	trix (F	3)				elow Surface (S8) (LRR K, L)
	d Below Dark Surf	ace (A11)						•	urface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Dar						nese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Redox Depre	ssion	is (F8)			Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
-	ileyed Matrix (S4)							Mesic Spodio	c (TA6) (MLRA 144A, 145, 149B)
-	edox (S5)							Red Parent N	Material (F21)
	d Matrix (S6)	ALDA 140	DD)					•	Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	VILKA 145	98)					Other (Expla	in in Remarks)
3Indicators	of hydrophytic veg	getation a	and wetland hydr	ology	/ must be	e preser	it, unless disturbe	ed or problematic.	
Restrictive I	ayer (if observed)	:							
	Type:		None	_		Hydric	Soil Present?	•	Yes No
	Depth (inches):			_					
Remarks:								,	
A positive in	ndication of hydric	soil was	observed. The cr	iteric	n for hy	dric soil	is met.		
	•				-				
l									



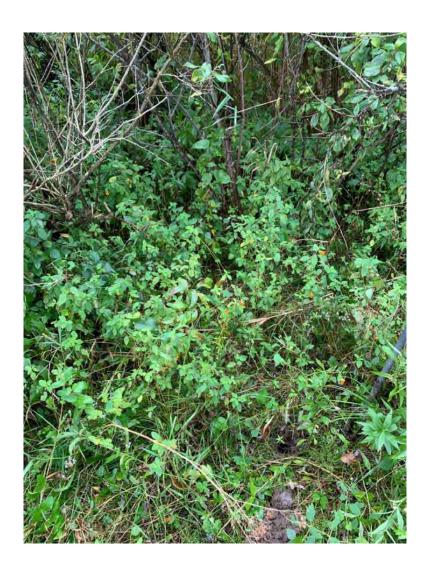




Photo of Sample Plot North



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pro	ject	City/County: Spra	akers, Montgomery County	Saı	Sept-15			
Applicant/Owner: SunEast		_	State: NY	Samp	oling Point: W-JMP	-25_UPL-1		
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Light	t	Section, Township,	Range: NA				
Landform (hillslope, terrace, etc.)	: Flat		Local relief (concave, conv	ex, none): Con	vex	Slope (%): 1 to 3		
Subregion (LRR or MLRA):	RR L		Lat: 42.859171743	2 Long: -74.5	518915446 [Datum: WGS84		
Soil Map Unit Name: Ilion silt l	oam, IIA				NWI classification:	None		
Are climatic/hydrologic condition	s on the site typical	for this time of ye	ear? Yes 🟒 No	(If no, exp	lain in Remarks.)			
Are Vegetation, Soil,	or Hydrology _	significantly di	sturbed? Are "Norm	al Circumstance	s" present? Ye	es No _ _/		
Are Vegetation, Soil,	or Hydrology _	naturally prob	lematic? (If needed,	explain any ans	wers in Remarks.)			
SUMMARY OF FINDINGS – A	ttach site map s	howing sampli	ng point locations, trar	nsects, impor	tant features, et	ıc.		
Hydrophytic Vegetation Present	· ·	No	1					
			la Aba Camania di Amaa wikhi	18/-+l	Vaa	No. 4		
Hydric Soil Present?		No _ _ _	Is the Sampled Area withi	n a wetiand?	Yes _	No <u></u>		
Wetland Hydrology Present?	Yes _	No / _	If yes, optional Wetland Si	ite ID:				
Remarks: (Explain alternative pr	ocedures here or in	a separate report)					
Covertype is UPL. Area is upland	l, not all three wetla	and parameters are	e present. Circumstances a	re not normal d	ue to agricultural a	activities.		
Circumstances are not normal d			•		Ü			
Circumstances are not normal d	ue to mowing or ve	getation.						
HADBOLOCA								
HYDROLOGY								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of	one is required; ch	eck all that apply)		Secondary Indi	cators (minimum o	of two required)		
•	·			-	l Cracks (B6)			
Surface Water (A1)		Water-Stained Lea		Drainage Patterns (B10)				
High Water Table (A2)		Aquatic Fauna (B1		Moss Trim Lines (B16)				
Saturation (A3)		Marl Deposits (B1		Dry-Season Water Table (C2)				
Water Marks (B1)		Hydrogen Sulfide		Crayfish Burrows (C8)				
Sediment Deposits (B2)			neres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)		Presence of Redu	ced Iron (C4)		Stressed Plants (D1	-		
Algal Mat or Crust (B4)		Recent Iron Redu	ction in Tilled Soils (C6)		ic Position (D2)	,		
Iron Deposits (B5)		Thin Muck Surface	e (C7)	Shallow Aqu				
Inundation Visible on Aerial I	magery (B7)	Other (Explain in I	Remarks)					
Sparsely Vegetated Concave					raphic Relief (D4)			
				FAC-Neutra	l Test (D5)			
Field Observations:								
Surface Water Present?	Yes No _	<u>∠</u> Depth	(inches):	_				
Water Table Present?	Yes No	∠ Depth	(inches):	Wetland Hydro	logy Present?	Yes No		
Saturation Present?	Yes No	✓ Depth	(inches):	-				
(includes capillary fringe)				-				
						_		
Describe Recorded Data (stream	i gauge, monitoring	well, aerial photo	s, previous inspections), if a	available:				
Dama adva.								
Remarks:								
The criterion for wetland hydrol	ogy is not met. No p	positive indication	of wetland hydrology was	observed.				

				1			
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test workshee Number of Dominant Spe			
1.	70 COVC	Species.	Status	Are OBL, FACW, or FAC:	cies inde	0	(A)
2.				Total Number of Dominar	nt Species	1	(B)
3.				Across All Strata:		•	(b)
4.	·			Percent of Dominant Spec	ies That	0	(A/B)
5.	·			Are OBL, FACW, or FAC:			
6.	·			Prevalence Index workshe			_
7.				Total % Cover of:		Multiply	-
	0	= Total Cov	er	OBL species	0	x 1 = _	0
Sapling/Shrub Stratum (Plot size:15 ft)		-		FACW species	0	x 2 = _	0
1.				FAC species	0	x 3 =	0
2.	·			FACU species	100	x 4 =	400
3.	· 			UPL species	0	x 5 = _	0
4.				Column Totals	100	(A) _	400 (B)
5.				Prevalence Inde	x = B/A =	4	
6.				Hydrophytic Vegetation In	dicators:		
7.	· ——			1- Rapid Test for Hyd	lrophytic V	egetation	1
··	0	= Total Cov	er	2 - Dominance Test i	s > 50%		
Herb Stratum (Plot size: 5 ft)		- Total Cov	Ci	3 - Prevalence Index	is ≤ 3.0^{1}		
1. Dactylis glomerata	100	Yes	FACU	4 - Morphological Ac			supporting
2.	100	103	17100	data in Remarks or on a s			
3.				Problematic Hydrop	, ,	-	
				¹Indicators of hydric soil a		-	gy must be
4				present, unless disturbed		natic	
5				Definitions of Vegetation 9			
6				Tree – Woody plants 3 in.			diameter at
7				breast height (DBH), regar		_	DDId
8.				Sapling/shrub – Woody pl greater than or equal to 3			JBH and
9.				Herb – All herbaceous (no			gardless of
10				size, and woody plants les			gai diess oi
11				Woody vines – All woody v			28 ft in
12				height.	8. ca.		
	100	= Total Cov	er	Hydrophytic Vegetation F	Procent? \	/oc N	-lo (
Woody Vine Stratum (Plot size: 30 ft)				Trydrophlytic vegetation F	resent: 1	C3 I	NO _ 7 _
1							
2							
3							
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separat	e sheet.)			_			
Active agricultural field. No positive indication of hydro		etation was	observed (≥	≥50% of dominant species in	ndexed as	FAC- or d	lrier).
, ,	, , ,		,	'			•

	•	to the d	•			ndicato	or confirm the a	bsence of indicators	.)		
Depth (inches)	Matrix Color (moist)	<u></u> %	Color (moist)			Loc2	Tov	turo		Domarl	vc.
0 - 8	10YR 3/3	100	Color (moist)	<u>%</u>	Type ¹	Loc ²	Text			Remark	<u> </u>
8 - 20	10YR 4/3	90	7.5YR 4/6	10			Silt Loam Silty Clay Loam				
8 - 20	101114/3	90	7.51K 4/0	10	C	IVI	Silty Cla	ly LUaiii			
		- —		- —							
		·									
		- —									
				- —							
¹Type: C = 0	Concentration, D =	Depleti	on, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore L	ning, I	M = Matrix.	
Hydric Soil	Indicators:							Indicators for Prol	olemat	ic Hydric Soils	s³:
Histoso			Polyvalue Be	low S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A1	0) (LR I	R K, L, MLRA 1	49B)
	pipedon (A2)		Thin Dark Su					Coast Prairie R			
l	istic (A3)		Loamy Muck	-		(LRR K, I	_)	5 cm Mucky Pe			
	en Sulfide (A4)		Loamy Gleye					Dark Surface (
	ed Layers (A5)		Depleted Ma					Polyvalue Belo	w Sur	face (S8) (LRR	K, L)
'	ed Below Dark Surf	ace (A11						Thin Dark Surf	ace (S	9) (LRR K, L)	
	ark Surface (A12) Mucky Mineral (S1)		Depleted Da Redox Depre					Iron-Mangane	se Mas	sses (F12) (LRF	R K, L, R)
			Redox Depre	255101	15 (ГО)			Piedmont Floo	dplair	Soils (F19) (M	ILRA 149B)
-	Gleyed Matrix (S4)							Mesic Spodic (TA6) (N	ЛLRA 144A, 14	l5, 149B)
-	Redox (S5)							Red Parent Ma			
	d Matrix (S6)		25					Very Shallow [ark Su	ırface (TF12)	
Dark St	urface (S7) (LRR R, N	VILKA 14	98)					Other (Explain	in Rer	narks)	
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must be	e preser	t, unless disturbe	ed or problematic.			
Restrictive	Layer (if observed)	:									
	Type:		None			Hydric	Soil Present?	Υ	es	_ No <u>_</u>	
	Depth (inches):			-		-					
Remarks:						1		·			
	e indication of hydr	ic soils v	was observed. The	e crite	erion for	hydric s	oil is not met.				





Photo of Sample Plot South



Project/Site: Flat Creek Solar Pr	oject	City/County: Spr	akers, Montgomery Coun	ty S	Sampling Date: 2021-Sept-1			
Applicant/Owner: SunEast			State: N	Y Sa	Sampling Point: W-JMP-25_UPL-2			
Investigator(s): Jerry Peake, S	teve Spotts, Abi Lig	ght	Section, Townshi	p, Range: NA				
Landform (hillslope, terrace, etc	:.): Flat		Local relief (concave, co	nvex, none): N	one	Slope (%): 1 to 3		
Subregion (LRR or MLRA):	LRR L		Lat: 42.859162	Long: -7	4.516828	Datum: WGS84		
Soil Map Unit Name: Ilion silt	: loam,IIA				NWI classification:	None		
Are climatic/hydrologic conditio	ns on the site typic	cal for this time of ye	ear? Yes 🔽 N	lo (If no, e	xplain in Remarks.)			
Are Vegetation $\underline{\checkmark}$, Soil $\underline{\checkmark}$,	or Hydrology	significantly d	isturbed? Are "Nor	mal Circumstan	ces" present? Ye	es No _ _/		
Are Vegetation, Soil,	or Hydrology	naturally prob	lematic? (If neede	d, explain any a	inswers in Remarks.)			
SUMMARY OF FINDINGS -	Attach site mag	showing sampli	ng point locations, tr	ansects, impo	ortant features, et	c.		
Hydrophytic Vegetation Presen		s No / _	<u> </u>					
, , ,			la tha Canania d Anas wit	h: \\/ - \	Vaa	No. 7		
Hydric Soil Present?		s No _ _/	Is the Sampled Area wit		res_	No <u>/</u>		
Wetland Hydrology Present?	Yes	S No	If yes, optional Wetland	Site ID:				
Remarks: (Explain alternative p	rocedures here or	in a separate repor	t)					
Covertype is UPL. Area is uplan	d, not all three we	tland parameters ar	e present. Circumstances	are not norma	l due to agricultural a	ctivities.		
HYDROLOGY								
Wetland Hydrology Indicators:								
Primary Indicators (minimum o	of one is required:	check all that apply)		Secondary In	ndicators (minimum o	f two required)		
				•	Soil Cracks (B6)			
✓ Surface Water (A1)	-	Water-Stained Le		Drainage				
✓ High Water Table (A2)	-	Aquatic Fauna (B		_	m Lines (B16)			
✓ Saturation (A3) Water Marks (B1)	_	Marl Deposits (B1 Hydrogen Sulfide		Dry-Seaso	on Water Table (C2)			
Sediment Deposits (B2)	-		heres on Living Roots (C3	Crayfish Burrows (C8)				
Drift Deposits (B3)	-	Oxidized Kriizosp Presence of Redu	_	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	-		ction in Tilled Soils (C6)		or Stressed Plants (D1)		
Iron Deposits (B5)	-	Thin Muck Surfac		•	Geomorphic Position (D2)			
Inundation Visible on Aerial	Imagery (B7)	 Other (Explain in			Aquitard (D3)			
Sparsely Vegetated Concave					ographic Relief (D4)			
Field Observations				FAC-Neut	tral Test (D5)			
Field Observations:	Voc. 4 N-	Daniel	(inches)					
Surface Water Present?	Yes No _		(inches): 1	_[
Water Table Present?	Yes No _		(inches): 0	Wetland Hyd	drology Present?	Yes No		
Saturation Present?	Yes No _	Depth	(inches): 0					
(includes capillary fringe)								
Describe Recorded Data (stream	m gauge, monitori	ng well, aerial photo	s, previous inspections), i	if available:				
Remarks:								
Hydrology is influenced by hear	vy rain prior to dat	ta plot collection.						

<u>'</u>				T		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	at .	
1.	70 COVE	3pecies:	Jiaius	Are OBL, FACW, or FAC:	0	(A)
2.				Total Number of Dominant Speci	es	
3.				Across All Strata:	2	(B)
4.				Percent of Dominant Species Tha	t 0	(A (D)
-				Are OBL, FACW, or FAC:		(A/B)
5				Prevalence Index worksheet:		
6				Total % Cover of:	<u>Multiply</u>	<u>By:</u>
7				OBL species 0	x 1 =	0
	0	= Total Cov	er	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species 0	x 3 =	0
1				FACU species 120	x 4 =	480
2				UPL species 0	x 5 =	0
3				Column Totals 120	(A)	480 (B)
4.				Prevalence Index = B/A	_ ` ` -	(2)
5				Hydrophytic Vegetation Indicator		
6.				' ' ' '		_
7				1- Rapid Test for Hydrophyt	_	1
	0	= Total Cov	er	2 - Dominance Test is > 50%		
Herb Stratum (Plot size:5 ft)		-		3 - Prevalence Index is ≤ 3.0		
1. Dactylis glomerata	80	Yes	FACU	4 - Morphological Adaptatio data in Remarks or on a separate		supporting
2. Trifolium pratense	25	Yes	FACU	Problematic Hydrophytic Ve		volain)
3. Plantago major	15	No	FACU	Indicators of hydric soil and wetl		
4.				present, unless disturbed or prob	-	igy must be
5.				<u> </u>	lematic	
6.				Definitions of Vegetation Strata:		al:aa.a.a.a.a.a.a.
7.				Tree – Woody plants 3 in. (7.6 cm breast height (DBH), regardless o		diameter at
8.				Sapling/shrub – Woody plants les	_	DBH and
9.				greater than or equal to 3.28 ft (1		DBITAIIU
				Herb – All herbaceous (non-wood		gardless of
10.				size, and woody plants less than		gar aress or
11.				Woody vines – All woody vines gr		3.28 ft in
12				height.		
	120	= Total Cov	er	Hydrophytic Vegetation Present	Voc I	No. 1
Woody Vine Stratum (Plot size: 30 ft)				Hydrophytic vegetation Presents	res r	NO <u>7</u>
1						
2						
3						
4						
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a separa	te sheet)					
·		atation was	observed (>	=E004 of dominant species indexed	os EAC- or c	drior)
Active agricultural field. No positive indication of hydro	phytic vege	etation was	observed (≥	250% of dominant species indexed	as FAC- or c	irier).

Profile Des	cription: (Describe t	to the de	epth needed to de Redox			ndicator	or confirm the a	bsence of indicators	5.)		
(inches)	Color (moist)	<u></u> %	Color (moist)			Loc2	Text	uro			Remarks
0 - 9			Color (moist)	90	Type ¹	Loc ²	Silty Cla			r	Remarks
	10YR 3/3	100		_			Silty Cla	y Loaiii			
9 - 15		· — ·		_							
		. —		_							
				_							
				_							
				_							
				_							
				_							
				_							
¹Type: C = 0	Concentration, D = I	Denletio	n RM = Reduced	— Mat	rix MS =	Masked	Sand Grains 21	ocation: PL = Pore L	ining	M = Mat	trix
Hydric Soil		Depictio	II, KW Keddeed	iviac	117, 1415	Maskea	Sana Grains. E	Indicators for Pro			
-			Dobazaluo Pol	O144 C	jurfaco (S	9) (I DD I	D MI DA 140D)			•	
Histoso	oipedon (A2)		Polyvalue Bei Thin Dark Sui				R, MLRA 149B)	2 cm Muck (A1			
	istic (A3)		Loamy Mucky					Coast Prairie F			
	en Sulfide (A4)		Loamy Gleye			(LKK K, L	-)	5 cm Mucky P			3) (LRR K, L, R)
-	d Layers (A5)		Depleted Ma					Dark Surface (
	d Below Dark Surfa							Polyvalue Beld			
	ark Surface (A12)		Depleted Dar					Thin Dark Surf			
	Mucky Mineral (S1)		Redox Depre					Iron-Mangane			
•	Gleyed Matrix (S4)				• •			Piedmont Floo			
-	Redox (S5)							Mesic Spodic (14A, 145, 149B)
_	d Matrix (S6)							Red Parent Ma			
	ırface (S7) (LRR R, M	II DΔ 1/IC	IR)					Very Shallow [TF12)
Dark 30	irrace (57) (ERR R, IV	ILIVA 143	,D)					Other (Explain	in Re	marks)	
³ Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must be	e presen	t, unless disturbe	d or problematic.			
Restrictive	Layer (if observed):										
	Type:		None			Hydric	Soil Present?	١	es	_ No _,	∠
	Depth (inches):			•							
Remarks:		_				1					
No positive	indication of hydri	c soils w	as observed. Ref	usal (due to co	arse fra	gments.				





Photo of Sample Plot North



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County		Sampling Date: 2021-Sept-16		
Applicant/Owner: SunEast		<u> </u>	State: NY		Sampling Point: W-JMI	P-26_PEM-1	
Investigator(s): Jerry Peake, St	eve Spotts, Abi Lig	ht	Section, Township,	Range: NA	Α		
Landform (hillslope, terrace, etc.): Flat		Local relief (concave, conv	ex, none):	Concave	Slope (%): 1 to 3	
Subregion (LRR or MLRA):	_RR L		Lat: 42.8589577498	8 Long:	-74.5202189177	Datum: WGS84	
Soil Map Unit Name: Ilion silt	loam, IIA				NWI classification	: None	
Are climatic/hydrologic condition	ns on the site typica	al for this time of ye	ar? Yes No	_ ∠ (If no,	explain in Remarks.)		
Are Vegetation <u></u> ✓, Soil <u>✓</u> ,	or Hydrology ₋	significantly dis	sturbed? Are "Norma	al Circumst	tances" present?	/es No 	
Are Vegetation, Soil,	or Hydrology ₋	naturally probl	ematic? (If needed,	explain an	y answers in Remarks.)		
SUMMARY OF FINDINGS – A	Attach site map	showing samplir	ng point locations, tran	sects, im	portant features, e	etc.	
Hydrophytic Vegetation Present		✓_ No	<u> </u>		·		
Hydric Soil Present?	_	✓ No	Is the Campled Area within	o a Wotlan	d2 Voc	/ No	
,			Is the Sampled Area within			_∕_ No	
Wetland Hydrology Present?	· · · · · · · · · · · · · · · · · · ·	✓ No	If yes, optional Wetland Si	te ID:	W-JM	1P-26	
Remarks: (Explain alternative pr							
Covertype is PEM. Area is wetlar						getation.	
Circumstances are not normal of	lue to agricultural	activities. Heavy rair	storms day/night prior to	data plot c	collection.		
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of	f one is required: c	heck all that annly)		Secondary	y Indicators (minimum	of two required)	
Trimary maleators (minimal of	one is required, e	neek all that apply)		-	e Soil Cracks (B6)	or two requireds	
∕ Surface Water (A1)	_	_ Water-Stained Lea			ge Patterns (B10)		
<u>✓</u> High Water Table (A2)	_	_ Aquatic Fauna (B1			Trim Lines (B16)		
✓ Saturation (A3)	_	_ Marl Deposits (B1			eason Water Table (C2)		
Water Marks (B1)	_	_ Hydrogen Sulfide		Crayfis	sh Burrows (C8)		
Sediment Deposits (B2)	_		neres on Living Roots (C3)	✓ Satura	tion Visible on Aerial Im	nagery (C9)	
Drift Deposits (B3) Algal Mat or Crust (B4)	_	_ Presence of Reduc	tion in Tilled Soils (C6)	Stunte	d or Stressed Plants (D	1)	
Algai Mat of Crust (B4)	_	_ Recent from Reduc _ Thin Muck Surface		_✓ Geomo	orphic Position (D2)		
Inundation Visible on Aerial		_ Other (Explain in R		Shallov	w Aquitard (D3)		
Sparsely Vegetated Concave	0 ,	_ Other (Explain in i	Ciliai K3)		opographic Relief (D4)		
				∕ FAC-Ne	eutral Test (D5)		
Field Observations:							
Surface Water Present?	Yes 🟒 No _	Depth	(inches): 1				
Water Table Present?	Yes 🟒 No _	Depth	(inches): 0	Wetland H	Hydrology Present?	Yes No	
Saturation Present?	Yes <u></u> ✓ No _	Depth	(inches): 0				
(includes capillary fringe)			· · · · ——				
Describe Recorded Data (stream	n gauge monitorir	o well aerial nhotos	nrevious inspections) if a	vailahle.			
Bescribe Recorded Bata (stream	n gaage, monitorin	ig Well, derial priotos	s, previous inspections), ir o	ivaliable.			
Remarks:							
The criterion for wetland hydrol	ogy is met. A posit	ive indication of wet	tland hydrology was observ	/ed (primai	ry and secondary indica	ators were present).	

Tree Stratum (Plot size:30 ft)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant		6	(4)
1. Acer negundo	20	Yes	FAC	Are OBL, FACW, or FAC		<u> </u>	(A)
2. Acer saccharinum	15	Yes	FACW	Total Number of Dom	inant Species	6	(B)
3.				Across All Strata:			(6)
4.				Percent of Dominant S	•	100	(A/B)
5.				Are OBL, FACW, or FAC			`
5.				Prevalence Index work			_
7.				Total % Cove		Multiply	-
	35	= Total Cov	er	OBL species	30	x 1 = _	30
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	220	x 2 = _	440
. Cornus amomum	15	Yes	FACW	FAC species	35	x 3 =	105
				FACU species	20	x 4 =	80
				- UPL species	0	x 5 =	0
·				- Column Totals	305	(A)	655 (B
· -				Prevalence I	ndex = B/A =	2.1	
				Hydrophytic Vegetation	n Indicators:		
·				1- Rapid Test for	Hydrophytic V	egetation/	
•	 15	= Total Cov	or	2 - Dominance Te	est is >50%		
Herb Stratum (Plot size: 5 ft)		_ TOTAL COV	CI	3 - Prevalence In	dex is $\leq 3.0^{1}$		
. Lysimachia nummularia	80	Yes	FACW	4 - Morphologica	•	-	supportin
. Phalaris arundinacea	60	Yes	FACW	data in Remarks or on	•		
3. Lythrum salicaria	30	No	OBL	- Problematic Hyd			•
In Impatiens capensis	<u></u>	No	FACW	¹Indicators of hydric s		,	gy must b
5. Symphyotrichum lanceolatum	15	No	FACW	present, unless distur		matic	
. Solidago canadensis	10	No	FACU	Definitions of Vegetati			U +
. Galium mollugo	10	No	FACU	Tree – Woody plants 3 breast height (DBH), re			nameter a
. Poa palustris	10	No	FACW	Sapling/shrub - Wood	-	_	NRH and
. Foa paiustris		INU	FACVV	greater than or equal	- 1		birana
				Herb – All herbaceous			ardless o
0				size, and woody plants			,a. a.e.s e
1				Woody vines – All woo			28 ft in
2		- Total C		height.			
Vande Vina Chrestown (Diet -i 20 ft)	240	= Total Cov	ei	Hydrophytic Vegetation	on Present? \	es 🗸 N	0
Voody Vine Stratum (Plot size: 30 ft)	4.5	Va-	EAC.	.,		<u></u> ''	
. <u>Vitis riparia</u>	15	Yes	FAC	-			
2							
3.				<u>-</u> [
l				.			
	15	= 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).

	cription: (Describe	to the c				ndicator	or confirm the a	bsence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure	Remarks
0 - 4	10YR 3/2	100					Silty Cla	y Loam	
4 - 10	10YR 4/1	95	7.5YR 3/4	5	C	M	Silty Cla	y Loam	
10 - 20	10YR 4/3	75	7.5YR 4/6	25	C	M	Silty Cla	y Loam	
-									
				_					
				_					
				_					
<u> </u>				—					
¹Type: C = 0	Concentration, D =	Depleti	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pr	oblematic Hydric Soils³:
Histoso	l (A1)		Polyvalue Be	low S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLR	A 149B)		e Redox (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L	.)		Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surface	
	ed Layers (A5)		_ ✓ Depleted Ma						elow Surface (S8) (LRR K, L)
	ed Below Dark Surf	face (A1							urface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da						nese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)			_	oodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
-	Redox (S5)							Red Parent I	
Strippe	d Matrix (S6)								v Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, I	MLRA 14	19B)					Other (Expla	
3Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must be	e presen	t, unless disturbe	•	·
-	Layer (if observed)		<u> </u>		,		,		
	Type:	,-	None			Hydric	Soil Present?		Yes No
	Depth (inches):	-	None			liyane	Jon 1 reserve.		163 <u>v</u> 110 <u> </u>
Damasuliai	Deptil (iliches).								
Remarks:		.,		., .					
A positive i	ndication of hydric	soil wa	s observed. The c	riterio	on for hy	dric soil	s met.		

Hydrology Photos



Vegetation Photos







Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Solar Project/Site: Flat Creek Solar Project/Site: Project/Site: Flat Creek Solar Project/Site: Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgome	ry County	y Sampling Date: 2021-Sept-16				
Applicant/Owner: SunEast			S	tate: NY	Sa	mpling Point: W-JM	1P-26_UPL-1		
Investigator(s):Jerry Peake, St	eve Spotts, Abi Ligh	Township,	Range: NA						
Landform (hillslope, terrace, etc.): Flat		Local relief (con	cave, conv	ex, none): C	onvex	Slope (%): 1 to 3		
Subregion (LRR or MLRA):	LRR L		Lat: 42.8	58809552	4 Long: -7	4.5201618368	Datum: WGS84		
Soil Map Unit Name: Ilion silt	loam,IIA					NWI classificatio	n: None		
Are climatic/hydrologic condition	ns on the site typica	l for this time of yea	ar? Ye	s No	_ ✓ (If no, ex	kplain in Remarks.)			
Are Vegetation <u></u> ✓, Soil <u>✓</u> ,	or Hydrology _	significantly dis	turbed? A	re "Norm	al Circumstar	nces" present?	Yes No		
Are Vegetation, Soil,	or Hydrology _	naturally proble	ematic? (I	f needed,	explain any a	answers in Remarks	.)		
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present?	t? Yes _ Yes _	showing samplin No No No	ng point locati	Area with	in a Wetland?		etc. sNo∠		
Remarks: (Explain alternative pr	rocedures here or in	n a separate report)							
		·		·					
HYDROLOGY Wetland Hydrology Indicators:									
Primary Indicators (minimum of	f one is required: ch	neck all that apply)			Secondary Ir	ndicators (minimum	of two required)		
Timary malcators (minimum o	one is required, cr	<u>теск ан итас арргут</u>			=	Soil Cracks (B6)	rortwo required)		
Surface Water (A1)		_ Water-Stained Lea				Patterns (B10)			
High Water Table (A2)		_ Aquatic Fauna (B1)			_	m Lines (B16)			
Saturation (A3)		_ Marl Deposits (B15			Dry-Seas	on Water Table (C2)			
Water Marks (B1)		_ Hydrogen Sulfide (oots (C2)	Crayfish	Burrows (C8)			
Sediment Deposits (B2) Drift Deposits (B3)	_	_ Oxidized Rhizosph _ Presence of Reduc	_	00ts (C3)	Saturatio	on Visible on Aerial I	magery (C9)		
Algal Mat or Crust (B4)		_ Recent Iron Reduc		ls (C6)	Stunted	or Stressed Plants (I	O1)		
Iron Deposits (B5)		_ Thin Muck Surface		13 (CO)		ohic Position (D2)			
Inundation Visible on Aerial	Imagery (B7)	_ Other (Explain in R				Aquitard (D3)			
Sparsely Vegetated Concave						ographic Relief (D4 tral Test (D5))		
Field Observations:									
Surface Water Present?	Yes 🔽 No _	Depth	(inches):	1					
Water Table Present?	Yes No	Depth	(inches):	16	Wetland Hyd	drology Present?	Yes No		
Saturation Present?	Yes 🟒 No _	Depth	(inches):	0					
(includes capillary fringe)									
Remarks: The criterion for wetland hydro			, previous inspe	cuons), ii a	avallable:				

				1			
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet Number of Dominant Speci			
1.	70 COVC	эресісэ.	Status	Are OBL, FACW, or FAC:	cs mac	0	(A)
2.				Total Number of Dominant	Species	1	(D)
3.				Across All Strata:	•		(B)
4.				Percent of Dominant Specie	es That	0	(A/B)
5.				Are OBL, FACW, or FAC:			(A/D)
6.				Prevalence Index workshee	et:		
7.				<u>Total % Cover of:</u>		Multiply	By:
··	0	= Total Cov	uor .	OBL species	0	x 1 =	0
Sapling/Shrub Stratum (Plot size:15 ft)		- Total Cov	rei	FACW species	0	x 2 =	0
1.				FAC species	0	x 3 =	0
				FACU species 1	100	x 4 =	400
2				UPL species	0	x 5 =	0
3.				Column Totals	100	(A)	400 (B)
4				Prevalence Index	= B/A =	4	
5				Hydrophytic Vegetation Ind	icators:		
6				1- Rapid Test for Hydro		egetation	1
7				2 - Dominance Test is		J	
	0	= Total Cov	/er	3 - Prevalence Index is	s ≤ 3.0¹		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological Ada	ptations ¹	(Provide	supporting
Dactylis glomerata	100	Yes	FACU	data in Remarks or on a sep			11 0
2				Problematic Hydrophy			(plain)
3				¹Indicators of hydric soil an	d wetlan	d hydrolo	gy must be
4				present, unless disturbed o	r probler	matic	
5				Definitions of Vegetation St	rata:		_
6				Tree – Woody plants 3 in. (7	'.6 cm) or	more in	diameter at
7				breast height (DBH), regard	lless of h	eight.	
8				Sapling/shrub - Woody plan			DBH and
9.				greater than or equal to 3.2			
10.				Herb – All herbaceous (non			gardless of
11.				size, and woody plants less			
12.				Woody vines – All woody vin	nes great	er than 3	.28 ft in
	100	= Total Cov	/er	height.			
Woody Vine Stratum (Plot size:30 ft)		-		Hydrophytic Vegetation Pro	esent? Y	′es N	No <u>~</u>
1.							
2.							
3.							
4.							
<u> </u>	0	= Total Cov	/er				
Remarks: (Include photo numbers here or on a separat							
No positive indication of hydrophytic vegetation was ob	served (≥	50% of don	ninant specie	es indexed as FAC– or drier).			

Profile Desc Depth	cription: (Describe t	to the	depth needed to o			indicator	or confirm the al	osence of indicato	ors.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	Iro	Remarks
0 - 8	10YR 3/2	95	7.5YR 3/4	5	С	M	Clay L		Remarks
8 - 18	10YR 4/1		7.5YR 4/6	40				-	
0-10	1018 4/1	60	7.51K 4/6	40		<u>M</u>	Silty Clay	LOam	
	•	- —							
				. —					
-									
-									
¹Type: 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									roblematic Hydric Soils³:
Histosol			Polyvalue Be	elow S	Surface (S	8) (LRR F	R, MLRA 149B)		•
l ——	oipedon (A2)		Thin Dark Su						(A10) (LRR K, L, MLRA 149B)
Black Hi			Loamy Mucl						e Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gley	-		. ,	•	-	Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Ma					Dark Surface	
Deplete	d Below Dark Surfa	ace (A1	1)_✓ Redox Dark	Surfa	ce (F6)				elow Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	ırk Su	rface (F7))			urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Redox Depr	essior	ns (F8)				loodplain Soils (F19) (MLRA 149B)
Sandy G	Gleyed Matrix (S4)								ic (TA6) (MLRA 144A, 145, 149B)
Sandy R	Redox (S5)							Red Parent	
Stripped	d Matrix (S6)								w Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M	ILRA 1	49B)					Other (Expla	
								•	
-	of hydrophytic veg		and wetland hyd	rolog	y must b	e presen	t, unless disturbe	d or problematic.	,
Restrictive I	Layer (if observed):								
	Type:		None			Hydric	Soil Present?		Yes/_ No
	Depth (inches):								
Remarks:									
A positive ir	ndication of hydric	soil wa	s observed. The o	riterio	on for hy	dric soil i	s met.		
,	•				,				

Vegetation Photos





Photo of Sample Plot East



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pro	oject	City/County: Sprakers, Mont	gomery County	SaS	Sampling Date: 2021-Sept-16		
Applicant/Owner: SunEast			State: NY	Sam	pling Point: W-JM	P-27_PEM-1	
Investigator(s): Jerry Peake, St	eve Spotts, Abi Light	Sec	tion, Township,	Range: NA			
Landform (hillslope, terrace, etc.)): Flat	Local relie	f (concave, conv	/ex, none): Cor	ıcave	Slope (%): 1 to 3	
Subregion (LRR or MLRA):	.RR L	Lat:	42.859705	Long: -74.	.516406	Datum: WGS84	
Soil Map Unit Name: Darien s	ilt loam, DaB				NWI classification	n:	
Are climatic/hydrologic condition	is on the site typical	for this time of year?	Yes No	_ ∠ (If no, exp	lain in Remarks.)		
Are Vegetation <u></u> ✓, Soil <u>✓</u> ,	or Hydrology	significantly disturbed?	Are "Norm	al Circumstance	es" present?	Yes No /	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed,	explain any an	swers in Remarks.))	
SUMMARY OF FINDINGS – A	Attach site map s	howing sampling point l	ocations, trai	nsects, impoi	rtant features, ε	etc.	
Hydrophytic Vegetation Present	? Yes .	<u>∕_</u> No					
Hydric Soil Present?		İ	pled Area with	in a Wetland?	Voc	✓ No	
		i	•				
Wetland Hydrology Present?			onal Wetland S	ite ID:	W-JM	1P-27	
Remarks: (Explain alternative pr	ocedures here or in	a separate report)					
mowing of vegetation.							
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of	one is required; che	eck all that apply)		Secondary Ind	licators (minimum	of two required)	
(Surface Water (A1)		Water Stained Leaves (PO)		Surface So	il Cracks (B6)		
✓ Surface Water (A1)✓ High Water Table (A2)		Water-Stained Leaves (B9) Aquatic Fauna (B13)		Drainage P	'atterns (B10)		
✓ Saturation (A3)		Marl Deposits (B15)		Moss Trim			
Water Marks (B1)		Hydrogen Sulfide Odor (C1)		-	n Water Table (C2)		
Sediment Deposits (B2)		Oxidized Rhizospheres on Liv	ing Roots (C3)	Crayfish Bu		(50)	
Drift Deposits (B3)		Presence of Reduced Iron (C	_		Visible on Aerial In		
Algal Mat or Crust (B4)		Recent Iron Reduction in Tille	ed Soils (C6)		Stressed Plants (D	1)	
Iron Deposits (B5)		Thin Muck Surface (C7)			nic Position (D2)		
Inundation Visible on Aerial	lmagery (B7)	Other (Explain in Remarks)		Shallow Aq	graphic Relief (D4)		
Sparsely Vegetated Concave	Surface (B8)				al Test (D5)		
Field Observations:					21 Test (25)		
Surface Water Present?	Yes No	Depth (inches):	2				
		•		- Wetland Hydr	ology Present?	Yes ./ No	
			-	-	5.08) 656	—	
	tes NO	Deptit (inches).		-			
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strean	Yes/_ No Yes/_ No n gauge, monitoring	Depth (inches):	8 0 inspections), if	-	ology Present?	Yes <u></u> No .	
Remarks:							
The criterion for wetland hydrol	ogy is met A nositiv	e indication of wetland hydro	logy was obser	ved (nrimary ar	nd secondary indic	ators were present	
The chiefforf for wetland hydror	ogy is met. A positiv	e maication of wetland hyurd	nogy was obser	veu (primary ai	id secondary maic	ators were present	

VEGETATION - Ose scientific flatties of plant						
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species That	2	(A)
1. <i>Quercus rubra</i>	20	Yes	FACU	Are OBL, FACW, or FAC:		
2. <u>Tilia americana</u>	15	Yes	FACU	Total Number of Dominant Species Across All Strata:	5	(B)
3. Carya ovata	10	No	FACU	Percent of Dominant Species That		
4. Populus tremuloides	10	No	FACU	- Are OBL, FACW, or FAC:	40	(A/B)
5				Prevalence Index worksheet:		
6				Total % Cover of:	Multiply	Dv.e
7.				- OBL species 90	<u>Multiply l</u> x 1 =	ву. 90
	55	= Total Cov	er	FACW species 30	x 2 =	60
Sapling/Shrub Stratum (Plot size: 15 ft)		-			_	
1. Populus tremuloides	5	Yes	FACU	· -	x 3 = _	75
2.				FACU species 60	x 4 = _	240
3.				UPL species 0	x 5 = _	0
4.				- Column Totals 205	(A) _	465 (B)
5.				Prevalence Index = B/A =	2.3	
6.				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic \	√egetation	
··		= Total Cov	or	2 - Dominance Test is > 50%		
Herb Stratum (Plot size: 5 ft)		- Total Cov	CI	\checkmark 3 - Prevalence Index is ≤ 3.0 ¹		
1. Persicaria sagittata	50	Yes	OBL	4 - Morphological Adaptations	1 (Provide :	supporting
	40	Yes		data in Remarks or on a separate sl		
2. Leersia oryzoides			OBL	- Problematic Hydrophytic Vege	-	
3. Carex pedunculata	25	No	FAC	- Indicators of hydric soil and wetlan	, .	gy must be
4. Phalaris arundinacea		No	FACW	present, unless disturbed or proble	matic	
5. Poa palustris	10	No	FACW	Definitions of Vegetation Strata:		
6.				Tree – Woody plants 3 in. (7.6 cm) o		diameter at
7				breast height (DBH), regardless of h	_	
8				Sapling/shrub – Woody plants less t		BH and
9				greater than or equal to 3.28 ft (1 m		
10				Herb – All herbaceous (non-woody)		gardless of
11				size, and woody plants less than 3.2		20 ft :
12				Woody vines – All woody vines grea height.	ter than 3.	28 IL III
	145	= Total Cov	er			
Woody Vine Stratum (Plot size: 30 ft)				Hydrophytic Vegetation Present?	Yes 🟒 N	lo
1				_		
2						
3.						
4.						
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a sepa		-				
•		valonco Ind	ov ic ~ 2 00	0		
A positive indication of hydrophytic vegetation was	observed (Pre	valence ind	ex is ≤ 5.00	·).		

	ription: (Describe	to the	•			ndicator	or confirm the ab	osence of indicato	ors.)
Depth _	Matrix	04	Redox			1002	Toyeta		Domarke
(inches) 0 - 4	Color (moist) 10YR 3/2	<u>%</u> 95	Color (moist) 10YR 4/6	<u>%</u> 5	Type¹ C	Loc ²	Textu Silty Clay		Remarks
4 - 15	10YR 4/1	85	7.5YR 4/4	15	C	<u>M</u>	Clay Lo		
15 - 20	10YR 3/2	40	7.5YR 4/4	20	C	M	Clay Lo		
15 - 20	10YR 3/1	40					Clay Lo	oam	
				. —					
		- —		. —					
-									
		- —							
-									
¹Type: C = C	oncentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil I	ndicators:							Indicators for Pr	roblematic Hydric Soils³:
Histosol	(A1)		Polyvalue Be	elow S	Surface (S	8) (LRR F	, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		Thin Dark Su						e Redox (A16) (LRR K, L, R)
Black Hi			Loamy Mucl	ky Mir	neral (F1)	(LRR K, L)		Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	trix (F2)			Dark Surface	
Stratifie	d Layers (A5)		_ <u>✓</u> Depleted Ma	atrix (F3)				elow Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A1	1) <u>✓</u> Redox Dark	Surfa	ce (F6)				urface (S9) (LRR K, L)
	rk Surface (A12)		Depleted Da						nese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Redox Depr	essior	ns (F8)				oodplain Soils (F19) (MLRA 149B)
Sandy G	leyed Matrix (S4)								c (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)							Red Parent N	
Stripped	l Matrix (S6)								v Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M	ILRA 1	49B)					Very Shahou	
3Indicators	of hydrophytic veg	otation	and wotland by	rolog	v must b	o procopi	tuplace disturbat	•	In remarks,
-			i and welland nyd	rolog	y must be	l presen	i, uriiess disturbet	u or problematic.	
	.ayer (if observed): 					l		,	v
	Type:		None			Hydric	Soil Present?	·	Yes No
	Depth (inches):								
Remarks:									
A positive in	ndication of hydric	soil wa	is observed.						

Hydrology Photos



Vegetation Photos





Photo of Sample Plot East



Project/Site: Flat Creek Solar Project/Site: Flat Creek Solar Project/Site: Project/Site: Flat Creek Solar Project/Site: Fla	oject	City/County: Spra	kers, Montgomery County	sty Sampling Date: 2021-Sept-16				
Applicant/Owner: SunEast			State: NY	Sampling Poir	nt: W-JMP-27_UPL-1			
Investigator(s):Jerry Peake, St	eve Spotts, Abi Ligh	Section, Township,	Range: NA					
Landform (hillslope, terrace, etc.): Flat		Local relief (concave, conv	ex, none): Convex	Slope (%): 1 to 3			
Subregion (LRR or MLRA):	.RR L		Lat: 42.859619	Long: -74.516526	Datum: WGS84			
Soil Map Unit Name: Darien s	ilt loam, DaB			NWI clas	sification:			
Are climatic/hydrologic condition	ns on the site typica	al for this time of yea	ar? Yes No	✓ (If no, explain in Rer	marks.)			
Are Vegetation $\underline{\checkmark}$, Soil $\underline{\checkmark}$,	or Hydrology _	significantly dis	turbed? Are "Norm	al Circumstances" preser	nt? Yes No 🟒			
Are Vegetation, Soil,	or Hydrology _	naturally probl	ematic? (If needed,	explain any answers in R	Remarks.)			
SUMMARY OF FINDINGS – A	Attach site map	showing samplir	ng point locations, trar	nsects, important fea	tures, etc.			
Hydrophytic Vegetation Present	-	No ∠ _	 	·				
Hydric Soil Present?		No	Is the Sampled Area with	in a Wetland?	Yes No _ ∠ _			
			i ·		163 140 <u></u>			
Wetland Hydrology Present?	· · · · · · · · · · · · · · · · · · ·	No	If yes, optional Wetland S	Site ID:				
Remarks: (Explain alternative pr	ocedures here or i	n a separate report)						
Covertype is UPL. Area is upland	d, not all three wetl	and parameters are	present. Circumstances a	re not normal due to agr	ricultural activities.			
Circumstances are not normal of	due to mowing of v	egetation. Heavy pr	ecipitation day/night prior	to data plot collection.				
circumstances are not normal	ac to moving or v	egetation. Heavy pri	ccipitation day/mg/ic prior	to data plot collection.				
HYDROLOGY								
ITIDROLOGI								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of	f one is required; cl	neck all that apply)		Secondary Indicators (m	ninimum of two required)			
Courte as Matau (A1)		\\/_+ C+=:===	(DO)	Surface Soil Cracks (B6)			
Surface Water (A1)		_ Water-Stained Lea		Drainage Patterns (E	310)			
High Water Table (A2)	_	_ Aquatic Fauna (B1		Moss Trim Lines (B1	6)			
Saturation (A3)		_ Marl Deposits (B15		Dry-Season Water Ta	able (C2)			
Water Marks (B1)		_ Hydrogen Sulfide (Crayfish Burrows (C	3)			
Sediment Deposits (B2)	_	· ·	eres on Living Roots (C3)	Saturation Visible or	n Aerial Imagery (C9)			
Drift Deposits (B3)	_	_ Presence of Reduc		Stunted or Stressed	Plants (D1)			
Algal Mat or Crust (B4)	_		tion in Tilled Soils (C6)	Geomorphic Position	n (D2)			
Iron Deposits (B5)	_	_ Thin Muck Surface		Shallow Aquitard (D3				
Inundation Visible on Aerial	Imagery (B7)	_ Other (Explain in F	Remarks)	Microtopographic Re				
Sparsely Vegetated Concave	Surface (B8)			FAC-Neutral Test (D5				
Field Observations:				TAC Neutral rest (DS	<i>,</i>			
Surface Water Present?	Yes No _	/ Denth (inches):					
Water Table Present?	Yes No _	·		Wetland Hydrology Pres	sent? Yes No			
			inches):	Wettand Hydrology Pres	zelift lez 140			
Saturation Present?	Yes No _	<u>✓</u> Depth (inches):					
(includes capillary fringe)								
Describe Recorded Data (stream	n gauge, monitorin	g well, aerial photos	, previous inspections), if a	available:				
Remarks:								
The criterion for wetland hydrol	logy is not met. No	positive indication of	of wetland hydrology was	observed.				
	-8,							
i								

				1			
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet Number of Dominant Speci		0	(4)
1. Quercus rubra	15	Yes	FACU	Are OBL, FACW, or FAC:			(A)
2. Populus tremuloides	10	Yes	FACU	Total Number of Dominant	Species	4	(B)
3. Tilia americana	10	Yes	FACU	Across All Strata:			(b)
4.			17.00	Percent of Dominant Specie	es That	0	(A/B)
5.				Are OBL, FACW, or FAC:			(700)
6.	_			Prevalence Index workshee	et:		
7.				Total % Cover of:		Multiply	By:
··	35	= Total Cov	or	OBL species	0	x 1 =	0
Continue (Charles Charles and (Diet sines 45 ft)		_ 10tal Cov	er	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	0	x 3 =	0
1				FACU species	145	x 4 =	580
2				UPL species	0	x 5 =	0
3				Column Totals	145	(A)	580 (B)
4				Prevalence Index	= B/A =	4	
5				Hydrophytic Vegetation Ind			
6				1- Rapid Test for Hydr		/ogotatio	2
7				2 - Dominance Test is		egetatioi	•
	0	= Total Cov	er	3 - Prevalence Index is			
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological Ada		(Drovido	cupporting
1. Dactylis glomerata	80	Yes	FACU	data in Remarks or on a se	•	•	supporting
2. <i>Taraxacum officinale</i>	15	No	FACU	Problematic Hydrophy			vnlain)
3. Trifolium repens	15	No	FACU	Indicators of hydric soil an			•
4.				present, unless disturbed o		-	igy must be
5.				Definitions of Vegetation St	•	Tidele	
6.	_			Tree – Woody plants 3 in. (7		more in	diameter at
7.				breast height (DBH), regard	-		ulainetei at
8.				Sapling/shrub - Woody plan		-	DBH and
9.				greater than or equal to 3.2			DDIT GITG
				Herb – All herbaceous (non			gardless of
11				size, and woody plants less			g
11				Woody vines – All woody vi			3.28 ft in
12				height.	Ü		
	110	_= Total Cov	er	Hydrophytic Vegetation Pr	esent? V	/es	No. /
Woody Vine Stratum (Plot size: 30 ft)				Trydrophydic vegetadoiri i	escrit. 1		10_
1							
2							
3							
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separa	ate sheet.)			_			
Active agricultural field. No positive indication of hydr		etation was	observed (≥	≥50% of dominant species inc	dexed as	FAC- or o	drier).
	-						

	cription: (Describe	to the d	•			ndicato	or confirm the al	bsence of indicato	ors.)
Depth _	Matrix	04	Redo:			Loc2	Toute	uro.	Domarko
(inches) 0 - 3	Color (moist)	100	Color (moist)	<u>%</u>	Type ¹	Loc ²	Textu		Remarks
3 - 15	10YR 4/2	100	10\/D 4/6	_			Silt Lo	-	
	10YR 4/2 10YR 4/3	95	10YR 4/6	5	<u> </u>	<u>M</u>	Silty Clay		
15 - 20	1018 4/3	85	10YR 5/8	10	C	M	Silty Clay		
15 - 20			5YR 4/6	5	C	M	Silty Clay	/ Loam	
				- —					
				- —					
				. —					
				- —					
				- —					
¹Type: C = 0	Concentration, D =	Depletion	on, RM = Reduced	d Mati	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils³:
Histoso			•				R, MLRA 149B)	2 cm Muck ((A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Su						e Redox (A16) (LRR K, L, R)
	istic (A3)		Loamy Muck	-		(LRR K, I	-)		Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surfac	
	d Layers (A5)	(844	_ <u> /</u> Depleted Ma					Polyvalue Be	elow Surface (S8) (LRR K, L)
	d Below Dark Surf	ace (A i i						Thin Dark S	urface (S9) (LRR K, L)
	ark Surface (A12) Jucky Mineral (S1)		Depleted Da Redox Depre					Iron-Manga	nese Masses (F12) (LRR K, L, R)
	-		Redox Depire	255101	15 (ГО)			Piedmont Fl	oodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
_	Redox (S5)							Red Parent	
	d Matrix (S6)		25					Very Shallov	v Dark Surface (TF12)
Dark St	ırface (S7) (LRR R, I	VILKA 14	98)					Other (Expla	ain in Remarks)
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must be	e preser	t, unless disturbe	d or problematic.	
Restrictive	Layer (if observed)	:							
	Type:		None			Hydric	Soil Present?		Yes/_ No
	Depth (inches):			-		1			
Remarks:									
	ndication of hydric	soil was	s observed. The c	riterio	on for hyd	dric soil	is met.		
, c posicire i		. 50	, , , , , , , , , , , , , , , , , , ,		,,,,,,,		.5		

Vegetation Photos





Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Sprak	kers, Montgomery County		Sampling Date: 202	21-Sept-16		
Applicant/Owner: SunEast			State: NY		Sampling Point: W-JMP-28_PEM-1			
Investigator(s): Jerry Peake, Sto	eve Spotts, Abi Ligh	nt	Section, Township,	Range: NA	Α			
Landform (hillslope, terrace, etc.)): Channel		 Local relief (concave, conv	ex, none):	Concave	Slope (%): 2 to 5		
Subregion (LRR or MLRA): L	.RR L	-	Lat: 42.8562141583	3 Long:	-74.5120772527	Datum: WGS84		
Soil Map Unit Name: Fonda m	ucky silty clay loan	n, Fo			NWI classification	n: None		
Are climatic/hydrologic condition	s on the site typica	al for this time of yea	r? Yes No	_ ∠ (If no,	explain in Remarks.)			
Are Vegetation, Soil,	or Hydrology ₋	significantly dist	turbed? Are "Norma	al Circumst	tances" present?	Yes 🟒 No		
Are Vegetation, Soil,	or Hydrology ₋	naturally proble	ematic? (If needed,	explain an	y answers in Remarks.)		
SUMMARY OF FINDINGS – A	Attach site map	showing samplin	g point locations, tran	sects, im	portant features, e	etc.		
Hydrophytic Vegetation Present	? Yes	✓_ No						
Hydric Soil Present?		ì	Is the Sampled Area within	n a Wetlan	nd? Yes No			
,		ł						
Wetland Hydrology Present?		·	If yes, optional Wetland Si	te ID:		ЛР-28		
Remarks: (Explain alternative pr								
Covertype is PEM. Area is wetlar	າd, all three wetlan	id parameters are pr	esent. Heavy precipitation	day/night	prior to data plot colle	ection.		
HYDROLOGY								
	_							
Wetland Hydrology Indicators:								
Primary Indicators (minimum of	one is required; cl	heck all that apply)		Secondary	/ Indicators (minimum	of two required)		
∕ Surface Water (A1)	Nater (A1) Water-Stained L				ace Soil Cracks (B6)			
High Water Table (A2)	_	_ Aquatic Fauna (B13		Drainage Patterns (B10)				
Saturation (A3)	_	_ Marl Deposits (B15		Moss Trim Lines (B16)				
Water Marks (B1)	_	_		Dry-Season Water Table (C2)				
Sediment Deposits (B2)	_	_ Oxidized Rhizosph	eres on Living Roots (C3)	Crayfish Burrows (C8)				
Drift Deposits (B3)	_	_ Presence of Reduc	_	Saturation visible on Aeriai imagery (C9)				
Algal Mat or Crust (B4)	_	_ Recent Iron Reduct	tion in Tilled Soils (C6)	Stunted or Stressed Plants (D1) _/ Geomorphic Position (D2)				
Iron Deposits (B5)	_	_ Thin Muck Surface	(C7)					
Inundation Visible on Aerial I	magery (B7)	_ Other (Explain in R	emarks)		low Aquitard (D3) otopographic Relief (D4)			
Sparsely Vegetated Concave	Surface (B8)							
Field Observations:				FAC-NE	eutral Test (D5)			
Surface Water Present?	Vos / No	Donth (inches): 2					
	Yes _ ✓ No _	•				V N-		
Water Table Present?	Yes No			wetland F	lydrology Present?	Yes No		
Saturation Present?	Yes No	Depth (inches): 0					
(includes capillary fringe)								
Describe Recorded Data (stream	າ gauge, monitorin	g well, aerial photos,	, previous inspections), if a	vailable:				
Remarks:								
	aguis mat A nasit	ive indication of wet	and hydrology was obser	ad (prima	m, and cocondan, indic	ratore wore precentl		
The criterion for wetland hydrol	ogy is met. A posit	ive maication of weti	and nydrology was observ	veu (prima	ry and secondary muc	ators were present).		

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test wor Number of Dominan Are OBL, FACW, or FA	t Species That	1	(A)
2. 3.				Total Number of Dor Across All Strata:		1	(B)
5. 4.				Percent of Dominant Are OBL, FACW, or FA	•	100	(A/B)
_				Prevalence Index wo	rksheet:		
5. 7.				Total % Cov	er of:	<u>Multiply</u>	<u>By:</u>
·		= Total Cov	or	OBL species	40	x 1 =	40
Caplina/Church Churchura (Dlat since 15 ft)		_ 10tal Cov	er	FACW species	105	x 2 =	210
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
				FACU species	10	x 4 =	40
2				UPL species	0	x 5 =	0
3.				Column Totals	155	(A)	290 (B)
4				Prevalence	Index = B/A =	1.9	
5.				Hydrophytic Vegetati		·	
5.				✓ 1- Rapid Test fo		/egetation	1
7				✓ 2 - Dominance Test is >50%			
	= Total Cover			✓ 3 - Prevalence Index is ≤ 3.01			
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphologic		¹ (Provide	supporting
1. <i>Phalaris arundinacea</i>	100	Yes	FACW	data in Remarks or o		-	
2. <i>Typha latifolia</i>	30	No	OBL	Problematic Hy	drophytic Vege	tation¹ (Ex	(plain)
3. Lythrum salicaria	10	No	OBL	¹Indicators of hydric	soil and wetlan	d hydrolo	gy must be
4. Solidago canadensis	10	No	FACU	present, unless distu	rbed or proble	matic	
5. Impatiens capensis	5	No	FACW	Definitions of Vegeta	tion Strata:		
5.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter			
7				breast height (DBH),	regardless of h	eight.	
3.				Sapling/shrub – Woody plants less than 3 in. DB			DBH and
).				greater than or equa	l to 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (non-woody) plants, regard			gardless of
11.				size, and woody plan	its less than 3.2	8 ft tall.	
12.				Woody vines – All wo	ody vines grea	ter than 3	.28 ft in
	155	= Total Cov	er	height.			
Noody Vine Stratum (Plot size:30 ft)		-		Hydrophytic Vegeta	tion Present? \	Yes <u></u> ✓ N	lo
3. 4.							
		= Total Cov	<u> </u>				
		_ 10tai C0V	CI .				

A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). No positive indication of hydrophytic vegetation was observed (\geq 50% of dominant species indexed as FAC- or drier). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

	cription: (Describe	to the de				ndicato	r or confirm the a	absence of indicato	ors.)
Depth	Matrix		Redox	Feat	tures				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc2	Text	ture	Remarks
0 - 8	10YR 3/1	95	5YR 3/4	5	С	М	Silty Cla	ay Loam	
8 - 20	10YR 3/1	100					Silty Cla	ay Loam	
				_					
				_					
				_					
-				_					
				_					
				_					
				_					
				_					
-									
-									
¹Tvne: C = 0	Concentration, D =	Depletio	n. RM = Reduced	— Mat	rix. MS =	Masked	Sand Grains 21	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil		Беріскі	.,,		,		54.14 5.4.15.		roblematic Hydric Soils³:
-			Dobaralus Dal	C	urfaca (C	O) /I DD I	D MI DA 140D)		•
Histoso			Polyvalue Bel						A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark Sur					Coast Prairie	e Redox (A16) (LRR K, L, R)
	istic (A3)		Loamy Mucky			(LKK K, I	-)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleyed					Dark Surface	e (S7) (LRR K, L)
	d Layers (A5)		Depleted Mat					Polyvalue Be	elow Surface (S8) (LRR K, L)
	d Below Dark Surfa ark Surface (A12)		Depleted Dar					Thin Dark Su	urface (S9) (LRR K, L)
			Redox Depre			,		Iron-Mangai	nese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Redox Depre	55101	IS (FO)			Piedmont Fl	oodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
_	Redox (S5)							Red Parent I	
Stripped	d Matrix (S6)								v Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, N	/ILRA 149	9B)					Other (Expla	
3Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	v must be	e preser	nt. unless disturbe	•	
-	Layer (if observed):		ana menana nyan	0.08	<i>y</i> ase & .	1	ic, amess aistars.	ca or propremation	
	-	•	None			Lhadria	Cail Dracant?		Voc. / No.
	Type:		None			Hydric	Soil Present?		Yes No
	Depth (inches):	_							
Remarks:									
A positive in	ndication of hydric	soil was	observed. The cri	iterio	on for hy	dric soil	is met.		

Vegetation Photos







Photo of Sample Plot North



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pro	ject	City/County: Spra	kers, Montgomery County	<u> </u>	Sampling Date: 2021	-Sept-16		
Applicant/Owner: SunEast			State: NY	Sa	mpling Point: W-JMP	² -28_UPL-1		
Investigator(s): Jerry Peake, Sto	eve Spotts, Abi Ligh	nt	Section, Township,	Range: NA				
Landform (hillslope, terrace, etc.)	: Flat		Local relief (concave, conv	ex, none): N	one	Slope (%): 1 to 3		
Subregion (LRR or MLRA): L	RR L		Lat: 42.856215601	1 Long: -7	4.51207831	Datum: WGS84		
Soil Map Unit Name: Fonda m	ucky silty clay loam	n, Fo			NWI classification:	: None		
Are climatic/hydrologic condition	s on the site typica	ol for this time of yea	ar? Yes No	_ ∠ (If no, ex	(plain in Remarks.)			
Are Vegetation 🟒 , Soil,	or Hydrology _	significantly dis	turbed? Are "Norm	al Circumstan	nces" present?	es No _ _/		
Are Vegetation, Soil,	or Hydrology _	naturally proble	ematic? (If needed,	explain any a	answers in Remarks.)			
SUMMARY OF FINDINGS - A	ttach site map	showing samplin	ng point locations, trai	nsects, impo	ortant features, et	tc.		
Hydrophytic Vegetation Present	? Yes _	No _ _ _						
Hydric Soil Present?	Yes _	✓_ No	Is the Sampled Area with	in a Wetland?	? Yes_	No⁄_		
Wetland Hydrology Present?	Yes _	No / _	If yes, optional Wetland	Site ID:				
Remarks: (Explain alternative pr	•							
Wetland Hydrology Indicators: Primary Indicators (minimum of 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)	· -	_ Water-Stained Lea _ Aquatic Fauna (B1: _ Marl Deposits (B1: _ Hydrogen Sulfide (_ Oxidized Rhizosph _ Presence of Reduc	3) 5) Odor (C1) eres on Living Roots (C3) ted Iron (C4) tion in Tilled Soils (C6)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)				
Inundation Visible on Aerial I	magery (B7)	_ Other (Explain in R	Remarks)		Aquitard (D3)			
Sparsely Vegetated Concave	Surface (B8)				oographic Relief (D4) tral Test (D5)			
Field Observations:					1030 (23)			
Surface Water Present?	Yes No _	✓ Depth (inches):					
Water Table Present?	Yes No _	•	inches):	- Wetland Hvd	drology Present?	Yes No _ ✓		
			· · · · · · · · · · · · · · · · · · ·	- Tredana riye	arology i reserie.			
Saturation Present?	Yes No _	<u>√</u> Deptii (inches):	-				
(includes capillary fringe) Describe Recorded Data (stream								
Remarks: The criterion for wetland hydrol								

Tron Stratum (Diatoizae 20 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:				
Tree Stratum (Plot size: <u>30 ft</u>) 1.	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC:	•	0	(A)	
2.				Total Number of Domin	ant Species	1	(B)	
3.				Across All Strata:				
ı				Percent of Dominant Sp		0	(A/B)	
5.				Are OBL, FACW, or FAC: Prevalence Index works				
i				Total % Cover		Multiply	Dv.	
·				- OBL species	<u>01.</u> 0	<u>миниргу</u> х 1 =	<u>ъу.</u> О	
	0	= Total Cove	er	FACW species	0	x 2 =	0	
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0	
				FACU species	110	x 4 =	440	
L				- UPL species	0	x 5 =	0	
				- Column Totals	110	(A)	440 (B)	
				Prevalence In		4	110 (5)	
i				•		<u> </u>		
5.				Hydrophytic Vegetation 1- Rapid Test for H		/ogotatio		
7				2 - Dominance Tes		egetatioi	1	
	0	= Total Cove	er	3 - Prevalence Index is $\leq 3.0^{\circ}$				
<u>lerb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological		(Provide	supporting	
. Solidago canadensis	100	Yes	FACU	data in Remarks or on a	•		Supporting	
. Parthenocissus quinquefolia	10	No	FACU	Problematic Hydro			xplain)	
3				Indicators of hydric soi	l and wetlan	d hydrolo	gy must be	
l				present, unless disturb	ed or probler	matic		
i				Definitions of Vegetatio	n Strata:			
5.				Tree – Woody plants 3 i	n. (7.6 cm) or	more in	diameter a	
7				breast height (DBH), reg	gardless of h	eight.		
3				Sapling/shrub – Woody			DBH and	
).				greater than or equal to				
0				Herb – All herbaceous (-		gardless of	
1				size, and woody plants			20.6.	
2				Woody vines – All wood height.	ly vines great	er than a	3.28 π In	
	110	= Total Cove	er					
Noody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	n Present? \	es l	No <u>Z</u>	
				-				
l				-				
3.				-				
1.				_				
	0	= Total Cove	er					

Profile Des	cription: (Describe	to the d	lepth needed to d	ocum	ent the i	indicato	or confirm the a	absence of indicato	rs.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture	Remarks
0 - 10	10YR 3/2	100					Silty Cla	ay Loam	
10 - 20	10YR 4/2	90	7.5YR 5/8	10		M	Silty Cla	ay Loam	
								<u>, </u>	
				_					
		—		_					
¹Tvpe: C = 0	Concentration, D =	Depleti	on. RM = Reduced	Matı	rix. MS =	Masked	Sand Grains. 2l	Location: PL = Pore	Lining, M = Matrix.
Hydric Soil		э оргос.	,		.,,				oblematic Hydric Soils ³ :
Histoso			Polyvalue Re	ow S	urfaca (S	:8) (I DD I	R, MLRA 149B)		•
	oipedon (A2)		Thin Dark Su						410) (LRR K, L, MLRA 149B)
Black Hi			Loamy Muck						Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye			(LKK K, I	-)	•	Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Ma					Dark Surface	
	d Below Dark Surf	ace (A11	•					•	low Surface (S8) (LRR K, L)
	ark Surface (A12)	acc (/ tr	Depleted Da			١		Thin Dark Su	rface (S9) (LRR K, L)
	Mucky Mineral (S1)		Redox Depre			,		Iron-Mangan	iese Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)		Nedox Bepre	33101	13 (10)			Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
-	•							Mesic Spodio	(TA6) (MLRA 144A, 145, 149B)
_	Redox (S5)							Red Parent N	/laterial (F21)
	d Matrix (S6)							Very Shallow	Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	/ILRA 14	l9B)					Other (Explai	in in Remarks)
³ Indicators	of hydrophytic veg	etation	and wetland hydi	ology	y must be	e presen	t, unless disturb	ed or problematic.	
Restrictive I	Layer (if observed):	:							
	Type:		None			Hydric	Soil Present?	,	Yes∕_ No
	Depth (inches):					'			
Remarks:	Depart (menes).								
	adication of budgic	coil wa	s observed The s	itorio	n for bu	dric coil	ic mot		
A positive ii	ndication of hydric	soli wa:	s observed. The ci	iterio	on for nyo	aric soii	is met.		

Vegetation Photos





Photo of Sample Plot East



Photo of Sample Plot South



Project/Site: Flat Creek Solar Project/Site: Flat Creek Solar Project/Site: Project/Site: Flat Creek Solar Project/Site: Project/Site: Flat Creek Solar Pro	oject C	ity/County: Sprakers, Mo	ntgomery County	<u>′</u> S	Sampling Date: 2021-Sept-16		
Applicant/Owner: SunEast			State: NY	San	mpling Point: W-JMF	P-29_PEM-1	
Investigator(s): Jerry Peake, St	eve Spotts, Abi Light	S	ection, Township,	Range: NA			
Landform (hillslope, terrace, etc.): Flat	Local rel	ief (concave, con	/ex, none): Co	ncave	Slope (%): 1 to 3	
Subregion (LRR or MLRA):	LRR L	Li	at: 42.854489602	26 Long: -74	1.5221218341	Datum: WGS84	
Soil Map Unit Name: Fredon s	silt loam, Fr				NWI classification	: None	
Are climatic/hydrologic condition	ns on the site typical fo	or this time of year?	Yes No	(If no, exp	plain in Remarks.)		
Are Vegetation $\underline{\checkmark}$, Soil $\underline{\checkmark}$,	or Hydrology	_ significantly disturbed?	Are "Norm	al Circumstand	ces" present? Y	′es No _	
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed,	explain any ar	nswers in Remarks.)		
SUMMARY OF FINDINGS – A	Attach site map sh	owing sampling poin	t locations, tra	nsects, impo	ortant features, e	tc.	
Hydrophytic Vegetation Present	 t? Yes _ _∕ _	_ No					
Hydric Soil Present?		i	ampled Area with	in a Wetland?	Yes	No	
		ł	ptional Wetland S		W-JM		
Wetland Hydrology Present?		,	puonai wetianu s	ite ib.	VV-JIVI	P-29	
Remarks: (Explain alternative pr	ocedures here or in a	separate report)					
Wetland Hydrology Indicators: Primary Indicators (minimum of 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	W A M H C P R T	ck all that apply) Vater-Stained Leaves (B9) quatic Fauna (B13) Marl Deposits (B15) lydrogen Sulfide Odor (C1) exidized Rhizospheres on resence of Reduced Iron (ecent Iron Reduction in T hin Muck Surface (C7) ether (Explain in Remarks)	Living Roots (C3) (C4) illed Soils (C6)	Surface Sc Drainage Moss Trim Dry-Seaso Crayfish B Saturatior / Stunted o _ / Geomorpl Shallow A	dicators (minimum of coil Cracks (B6) Patterns (B10) In Lines (B16) On Water Table (C2) Burrows (C8) In Visible on Aerial Im r Stressed Plants (D') hic Position (D2) quitard (D3)	nagery (C9)	
Sparsely Vegetated Concave	Surface (B8)			Microtope			
Field Observations:							
Surface Water Present?	Yes <u></u> ✓ No	Depth (inches):	2				
Water Table Present?	Yes _ 🗸 No	•		- Wetland Hydi	rology Present?	Yes _ ৴ _ No	
			-	- Vectoria riyar	lology i reserie.		
Saturation Present?	Yes No	Depth (inches):	0	-			
(includes capillary fringe)							
Remarks: The criterion for wetland hydro	logy is met. A positive	indication of wetland hyc	Irology was obser	ved (primary a	ınd secondary indica	ators were present).	

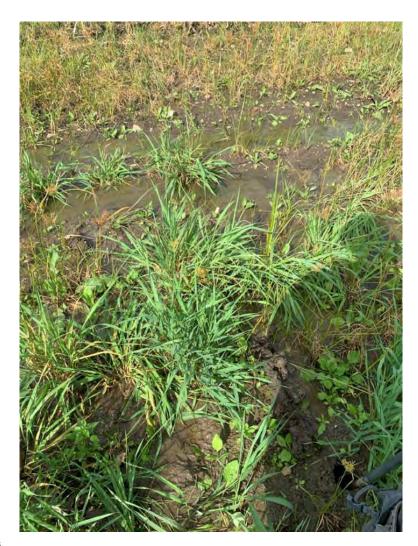
Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksh Number of Dominant S		2	(4)
1				Are OBL, FACW, or FAC:			(A)
2.				Total Number of Domin	ant Species	2	(B)
3.				Across All Strata:			(D)
4.				Percent of Dominant Sp Are OBL, FACW, or FAC:	ecies That	100	(A/B)
5				Prevalence Index works	heet:		
6				Total % Cover	of:	Multiply	By:
7				- OBL species	30	x 1 =	30
	0	= Total Cov	er	FACW species	60	x 2 =	120
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	5	x 3 =	15
1				FACU species	20	x 4 =	80
2				UPL species	0	x 5 =	0
3				Column Totals	115	(A)	245 (B)
4.				Prevalence In		2.1	(_)
5.				Hydrophytic Vegetation			
5.				1- Rapid Test for H		logotation	
7				2 - Dominance Tes		egetation	!
	0	= Total Cov	er	✓ 3 - Prevalence Inde			
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological		l (Provide	supporting
1. <i>Phalaris arundinacea</i>	60	Yes	FACW	data in Remarks or on a	•	•	3upporting
2. <i>Cyperus erythrorhizos</i>	30	Yes	OBL	Problematic Hydro			(plain)
3. <i>Plantago major</i>	15	No	FACU	¹Indicators of hydric soi			
4. Acalypha virginica	5	No	FACU	present, unless disturbe		-	6)
5. Barbarea vulgaris	5	No	FAC	Definitions of Vegetatio			
5.				Tree – Woody plants 3 ii		more in	diameter at
7.				breast height (DBH), reg			
3.				Sapling/shrub - Woody	plants less t	han 3 in. [DBH and
9.				greater than or equal to	3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	y vines great	ter than 3	.28 ft in
1-1	115	= Total Cov	er	height.			
Woody Vine Stratum (Plot size:30 ft)			·.	Hydrophytic Vegetation	Present?	∕es <u> </u>	lo
1.							
				•			
2. 3.				•			
ر. ا				•			
T				- [
	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 $hydrophytic\ vegetation\ was\ observed\ (Prevalence\ Index\ is \le 3.00).\ A\ positive\ indication\ of\ hydrophytic\ vegetation\ was\ observed\ (Rapid\ Test\ for\ New York of the New York of$ Hydrophytic Vegetation).

Depth Matrix	the d	epth needed to d Redox			ndicator	or confirm the al	osence of indicate	ors.)
	04				Loc2	Toyte	ıro	Domarko
(inches) Color (moist) 0 - 20 10YR 3/1	<u>%</u> 97	7.5YR 4/4	<u>%</u> 3	Type¹ C	Loc ²	Textu Silty Clay		Remarks
0-20 1018 3/1	97	7.518 4/4			IVI	Silty Clay	LUaiii	
	—		-					
	—		- —				-	
			- —					
			- —					
			_					
			_					
			_					
			_					
¹Type: C = Concentration, D = D	enletic	n. RM = Reduced	Matı	ix. MS =	Masked 9	Sand Grains. 21 o	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil Indicators:	сріссіс	n, no neadece	· ·····	17, 1113	Maskeas	and Grams.		roblematic Hydric Soils³:
Histosol (A1)		Polyvalue Be	low c	urface (S	8) (I DD D	MI RA 1/QR)		•
Histic Epipedon (A2)		Thin Dark Su						(A10) (LRR K, L, MLRA 149B)
Black Histic (A3)		Loamy Muck						e Redox (A16) (LRR K, L, R)
Hydrogen Sulfide (A4)		Loamy Gleye			(LIXIX IX, L)		-	Peat or Peat (S3) (LRR K, L, R)
Stratified Layers (A5)		Depleted Ma						te (S7) (LRR K, L)
Depleted Below Dark Surface	e (A11		-	-			,	elow Surface (S8) (LRR K, L)
Thick Dark Surface (A12)		Depleted Da						urface (S9) (LRR K, L)
Sandy Mucky Mineral (S1)		Redox Depre						nese Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4)				` ,				loodplain Soils (F19) (MLRA 149B)
Sandy Redox (S5)								ic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6)							Red Parent	
Dark Surface (S7) (LRR R, ML	DΔ 1/1	0R)					-	w Dark Surface (TF12)
Dark Surface (57) (Like K, ML	.10~ 1~	56)					_ <u>✓</u> Other (Expl	ain in Remarks)
³ Indicators of hydrophytic vege	tation	and wetland hyd	rology	/ must be	e present	, unless disturbe	d or problematic	•
Restrictive Layer (if observed):								
Type:		None			Hydric S	Soil Present?		Yes No
Depth (inches):			-					
Remarks:								
A positive indication of hydric s	oil was	observed. The c	riteric	on for hyd	dric soil is	s met. Soil signific	cantly disturbed a	as a result of tilling.

Hydrology Photos



Vegetation Photos







Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pr	oject	City/County: Spra	akers, Montgomery County	Sampling Dat	Sampling Date: 2021-Sept-16		
Applicant/Owner: SunEast			State: NY	Sampling Point	: W-JMP-29_UPL-1		
Investigator(s): Jerry Peake, St	teve Spotts, Abi Ligh	nt	Section, Township,	Range: NA			
Landform (hillslope, terrace, etc	.): Flat		Local relief (concave, conv	ex, none): None	Slope (%): 1 to 3		
Subregion (LRR or MLRA):	LRR L		Lat: 42.854710373	1 Long: -74.522085004	6 Datum: WGS84		
Soil Map Unit Name: Burdett	e channery silt loam	n, BuB		NWI class	ification: None		
Are climatic/hydrologic condition	ns on the site typica	l for this time of ye	ear? Yes No	(If no, explain in Rem	arks.)		
Are Vegetation $\underline{\checkmark}$, Soil $\underline{\checkmark}$,	or Hydrology _	significantly di	sturbed? Are "Norm	al Circumstances" present	? Yes No _ _/		
Are Vegetation, Soil,	or Hydrology _	naturally prob	lematic? (If needed,	explain any answers in Re	marks.)		
SUMMARY OF FINDINGS -	Attach site map	showing sampli	ng point locations, trai	nsects, important feat	ures, etc.		
Hydrophytic Vegetation Presen	-	No / _		•			
, , ,			le the Commission Americant	n a Matlam da	Van Na (
Hydric Soil Present?		No _ _/ _	Is the Sampled Area with	n a wetiand?	Yes No/		
Wetland Hydrology Present?	Yes _	No	If yes, optional Wetland S	ite ID:			
Remarks: (Explain alternative p	rocedures here or in	n a separate report	:)				
Covertype is UPL. Area is uplan	d, not all three wetl	and parameters ar	e present. Circumstances a	re not normal due to agric	cultural activities. Heavy		
precipitation day/night prior to		•	•	9	•		
precipitation day/riight prior to	data plot collection	•					
HYDROLOGY							
Watland Ludralam Indicators							
Wetland Hydrology Indicators:		1 11.1 . 13					
Primary Indicators (minimum o	f one is required; ch	neck all that apply)		Secondary Indicators (mi	•		
Surface Water (A1)		_ Water-Stained Le	aves (B9)	Surface Soil Cracks (B	•		
High Water Table (A2)		_ _ Aquatic Fauna (B1		Drainage Patterns (B1			
Saturation (A3)		_ . _ Marl Deposits (B1		Moss Trim Lines (B16)			
Water Marks (B1)		_ Hydrogen Sulfide		Dry-Season Water Tab			
Sediment Deposits (B2)			heres on Living Roots (C3)	Crayfish Burrows (C8)			
Drift Deposits (B3)		Presence of Redu	_	Saturation Visible on A	-		
Algal Mat or Crust (B4)	_	-	ction in Tilled Soils (C6)	Stunted or Stressed P			
Iron Deposits (B5)		_ Thin Muck Surfac		Geomorphic Position			
Inundation Visible on Aerial		_ Other (Explain in		Shallow Aquitard (D3)			
		_ Otrier (Explain in	Remarks)	Microtopographic Rel	ief (D4)		
Sparsely Vegetated Concave	e Surrace (B8)			FAC-Neutral Test (D5)			
Field Observations:							
Surface Water Present?	Yes No _	✓ Depth	(inches):				
Water Table Present?	Yes No _	•	(inches):	· Wetland Hydrology Prese	ent? Yes No		
			· · · · · · · · · · · · · · · · · · ·	. Wedana Hydrology Frese	int: 163140/		
Saturation Present?	Yes No _	<u>✓</u> Depth	(inches):	=			
(includes capillary fringe)							
Describe Recorded Data (stream	m gauge, monitorin	g well, aerial photo	s, previous inspections), if	available:			
	88-4	Б, р	-, p,p,				
Remarks:							
The criterion for wetland hydro	logy is not met. No	positive indication	of wetland hydrology was	observed.			
The chicanon for mediana ny are	1069 15 1100 11100 1110	positive marcation	or menama nyaronogy mas	5550. Tour			

							1
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test workshe Number of Dominant Spe			
1.				Are OBL, FACW, or FAC:		0	(A)
2.				Total Number of Domina	nt Species	1	(D)
3.				Across All Strata:			(B)
4.				Percent of Dominant Spe	cies That	0	(A/B)
5.			-	Are OBL, FACW, or FAC:			(A/B)
6.				Prevalence Index worksh	eet:		
				Total % Cover of	:	Multiply	<u>By:</u>
7		Tabal Ca		OBL species	0	x 1 =	0
5 1: (51 1.5: . (B)	0	= Total Cov	/er	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	0	x 3 =	0
1				FACU species	0	x 4 =	0
2				UPL species	70	x 5 =	350
3				Column Totals	70	(A)	350 (B)
4				Prevalence Inde	ex = B/A =	5	
5				Hydrophytic Vegetation Ir			
6				1- Rapid Test for Hyd		/ogotation	
7				2 - Dominance Test		egetation	'
	0	= Total Cov	/er	3 - Prevalence Index			
Herb Stratum (Plot size: <u>5 ft</u>)						l (Drovido	cupporting
1. Zea mays	70	Yes	UPL	4 - Morphological Addata in Remarks or on a s			supporting
2.				Problematic Hydrop			(nicla)
3.				Indicators of hydric soil a			
4.				present, unless disturbed		-	gy must be
5.				Definitions of Vegetation		Tiatic	
6.				Tree – Woody plants 3 in.		moro in	diameter at
7.				breast height (DBH), rega			ulameter at
8.				Sapling/shrub – Woody p		_	OBH and
9.				greater than or equal to 3			DDIT GITG
				Herb – All herbaceous (no			pardless of
10				size, and woody plants le	-		54. 4.055 0.
11.				Woody vines – All woody			.28 ft in
12				height.			
	70	= Total Cov	/er	Hydrophytic Vegetation I	Drocont2 \	/oc N	lo (
Woody Vine Stratum (Plot size: 30 ft)				Tiyaropriyac vegetadorri	resent:		···
1							
2							
3							
4.							
	0	= Total Cov	/er				
Remarks: (Include photo numbers here or on a separat	e sheet.)			_			
Active agricultural field. No positive indication of hydro	-	etation was	observed (>	>50% of dominant species i	ndexed as	FAC- or d	rier).
Active agricultural field. No positive indication of flydro	priyac vega	station was	00501704 (=	23070 of dominant species i	паслеа аз	1710 01 0	1101).

	•	to the de	•			ndicator o	or confirm the ab	osence of indicators.)	
Depth	Matrix	04	Redox			1002	Toyet	ura	Domorko
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u> %</u>	Type ¹	Loc ²	Text		Remarks
0 - 16	10YR 3/2	100					Silty Cla	y Loam	
				- —					
				- —					
				- —					
		- —		- —					
¹ Type: C = Co	ncentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked S	and Grains. ² Lo	ocation: PL = Pore Lini	ing, M = Matrix.
Hydric Soil In	dicators:							Indicators for Proble	ematic Hydric Soils³:
Histosol (A1)		Polyvalue Bel	low S	urface (S	8) (LRR R,	MLRA 149B)	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Histic Epi	pedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLRA	149B)		dox (A16) (LRR K, L, R)
Black Hist	tic (A3)		Loamy Muck	y Mir	eral (F1)	(LRR K, L)			t or Peat (S3) (LRR K, L, R)
Hydroger	Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S7	
Stratified	Layers (A5)		Depleted Ma	trix (I	- 3)				Surface (S8) (LRR K, L)
Depleted	Below Dark Surfa	ace (A11)	Redox Dark S	Surfa	ce (F6)			Thin Dark Surfac	
	k Surface (A12)		Depleted Dar						Masses (F12) (LRR K, L, R)
Sandy Mເ	ıcky Mineral (S1)		Redox Depre	ssior	ıs (F8)				plain Soils (F19) (MLRA 149B)
Sandy Gle	eyed Matrix (S4)								
Sandy Re	dox (S5)							•	(6) (MLRA 144A, 145, 149B)
Stripped	Matrix (S6)							Red Parent Mate	
	ace (S7) (LRR R, M	ILRA 149	9B)					Very Shallow Da	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,					Other (Explain in	i Remarks)
³ Indicators o	f hydrophytic veg	etation a	and wetland hydr	olog	y must be	e present,	unless disturbe	d or problematic.	
Restrictive La	yer (if observed):								
Т	ype:		None			Hydric S	oil Present?	Yes	s No⁄_
С	epth (inches):			-					
Remarks:	ерен (н.еневун								
No positive ii	ndication of hydri	c soils w	as observed. Soil	l sign	ificantly o	disturbed	as a result of till	ing.	

Vegetation Photos





Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	/	Sampling Date: 2021-Sept-16		
Applicant/Owner: SunEast			State: NY		Sampling Point: W-JM	P-30_PEM-1	
Investigator(s): Jerry Peake, Ste	eve Spotts, Abi Ligh	nt	Section, Township	, Range: N	Α		
Landform (hillslope, terrace, etc.)): Flat		Local relief (concave, con	vex, none):	Concave	Slope (%): 1 to 3	
Subregion (LRR or MLRA): L	.RR L		Lat: 42.85731307	71 Long:	-74.5210326346	Datum: WGS84	
Soil Map Unit Name: Madalin	silty clay loam, Ma				NWI classification	n: None	
Are climatic/hydrologic condition	s on the site typica	al for this time of ye	ar? Yes No	o <u> </u>	explain in Remarks.)		
Are Vegetation, Soil,	or Hydrology _	significantly dis	turbed? Are "Norm	nal Circumst	tances" present?	Yes No _ _/ _	
Are Vegetation, Soil,	or Hydrology _	naturally probl	ematic? (If needed	, explain an	y answers in Remarks.)	
SUMMARY OF FINDINGS – A	Attach site map	showing samplir	ng point locations, tra	nsects, im	nportant features, e	etc.	
Hydrophytic Vegetation Present	7 Yes	✓_ No	 				
Hydric Soil Present?	_	✓ No	ls the Campled Area with	in a Watlan	d2 Voc	/ No	
			Is the Sampled Area with			No	
Wetland Hydrology Present?	· · · · · · · · · · · · · · · · · · ·	✓ No	If yes, optional Wetland S	Site ID:		1P-30	
Remarks: (Explain alternative pr	ocedures here or i	n a separate report)	1				
Covertype is PEM. Area is wetlar			resent. Circumstances are	not norma	al due to agricultural ac	tivities. Heavy	
precipitation day/night prior to o	data plot collection	ı.					
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of	one is required: cl	neck all that apply)		Secondary	/ Indicators (minimum	of two required)	
1 Thirtiary indicators (Thirtimination of	one is required, er	reck all triat apply)		-	e Soil Cracks (B6)	or two required;	
∕_ Surface Water (A1)	_	_ Water-Stained Lea			age Patterns (B10)		
<u>✓</u> High Water Table (A2)	_	_ Aquatic Fauna (B1			Trim Lines (B16)		
✓ Saturation (A3)	_	_ Marl Deposits (B1			eason Water Table (C2)		
Water Marks (B1)	_	_ Hydrogen Sulfide		Crayfis	sh Burrows (C8)		
Sediment Deposits (B2)			eres on Living Roots (C3)	Satura	tion Visible on Aerial Ir	nagery (C9)	
Drift Deposits (B3) Algal Mat or Crust (B4)	_	_ Presence of Reduc	tion in Tilled Soils (C6)	_✓ Stunte	d or Stressed Plants (D	1)	
Algai Mat of Crust (B4) Iron Deposits (B5)		_ Recent fron Reduc _ Thin Muck Surface		∕ Geom	orphic Position (D2)		
Iron Deposits (B3) Inundation Visible on Aerial I	magery (R7)	_ Other (Explain in R		Shallov	w Aquitard (D3)		
Sparsely Vegetated Concave		_ Other (Explain in R	ciliai k5)	Microt	opographic Relief (D4)		
Sparsely vegetated concave	Surface (Bo)			<u></u> ✓ FAC-Ne	eutral Test (D5)		
Field Observations:							
Surface Water Present?	Yes No	Depth	(inches): 1	_			
Water Table Present?	Yes 🔽 No _	Depth	(inches): 5	Wetland F	Hydrology Present?	Yes No	
Saturation Present?	Yes 🟒 No _	Depth	(inches): 0				
(includes capillary fringe)				_			
Describe Recorded Data (stream	n gauge, monitorin	g well, aerial photos	s, previous inspections), if	available:			
•			., , , , , , , , , , , , , , , , , , ,				
Dama and an							
Remarks:				17.	1 1 1		
The criterion for wetland hydrol	ogy is met. A positi	ive indication of wet	land hydrology was obsei	ved (prima	ry and secondary indic	ators were present).	

2.		Species?	Status	Number of Dominant : Are OBL, FACW, or FAC	•	2	(A)
				Total Number of Domi Across All Strata:		2	(B)
3. 4.				Percent of Dominant S Are OBL, FACW, or FAC	•	100	(A/B)
5.				Prevalence Index work	sheet:	·	
5.				Total % Cover	<u>of:</u>	Multiply	<u>By:</u>
7				OBL species	50	x 1 =	50
	0	= Total Cove	er	FACW species	20	x 2 =	40
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	40	x 3 =	120
				FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3.				Column Totals	110	(A)	210 (B)
1				Prevalence I	ndex = B/A =	1.9	
j				Hydrophytic Vegetatio			
j				1- Rapid Test for		/egetation	
7				2 - Dominance Te		egetation	
	0	= Total Cove	er	✓ 3 - Prevalence Inc			
<u>-lerb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica		(Provido	cupporting
. Cyperus erythrorhizos	50	Yes	OBL	data in Remarks or on		-	supporting
2. Carex pedunculata	30	Yes	FAC	Problematic Hyd	•		(plain)
3. Phalaris arundinacea	20	No	FACW	- Indicators of hydric so			-
Ranunculus repens	10	No	FAC	present, unless disturb		,	5)
5.				Definitions of Vegetati	•		
5.				Tree – Woody plants 3		more in o	diameter at
'.	<u> </u>			breast height (DBH), re			
3.				Sapling/shrub - Wood	y plants less tl	han 3 in. [DBH and
).				greater than or equal t			
				Herb – All herbaceous	(non-woody)	plants, reg	gardless of
				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
Z	110	= Total Cove	· ·	height.			
Manda Vina Charles (Datains 20 ft)		- IOLAI COVE	:1	Hydrophytic Vegetation	on Present? \	∕es 🗸 N	10
Noody Vine Stratum (Plot size: <u>30 ft</u>) I.							
				-			
2.				-			
3.				<u>-</u>			
i		= Total Cove	or.	-			

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).

	ription: (Describe t	to the de	•			ndicato	or confirm the ab	osence of indicato	ors.)
Depth _	Matrix		Redox				- .		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Textu		Remarks
0 - 16	10YR 2/1	100		_			Silty Clay		
16 - 20	10YR 2/1	95	7.5R 5/8	5	C	<u>M</u>	Silty 0	lay	
				_					
-									
-									
-								_	
-				_					
		·		_					
_				_					
				_					
				-					
1T		Daralatia	- DM - Dadward		iv. MC =		Canal Cusins 21 a		Limina M = Materix
		Depletio	n, Rivi = Reduced	Mat	1X, IVIS =	Masked	Sand Grains, ² LC		E Lining, M = Matrix.
Hydric Soil I								Indicators for P	roblematic Hydric Soils³:
Histosol			,		-		R, MLRA 149B)	2 cm Muck ((A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		Thin Dark Su					Coast Prairi	e Redox (A16) (LRR K, L, R)
Black His			Loamy Mucky			(LRR K, I	-)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4) d Layers (A5)		Loamy Gleye					Dark Surfac	e (S7) (LRR K, L)
	d Layers (A5) d Below Dark Surfa		Depleted Mar					Polyvalue Be	elow Surface (S8) (LRR K, L)
	ark Surface (A12)	ice (ATT)	Neddx Dark 3					Thin Dark S	urface (S9) (LRR K, L)
	lucky Mineral (S1)		Redox Depre					Iron-Manga	nese Masses (F12) (LRR K, L, R)
			Redox Depre	33101	15 (1-0)			Piedmont Fl	loodplain Soils (F19) (MLRA 149B)
-	leyed Matrix (S4)							Mesic Spodi	ic (TA6) (MLRA 144A, 145, 149B)
_	edox (S5)							Red Parent	Material (F21)
	Matrix (S6)							Very Shallov	w Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 149)B)					⁄_ Other (Expla	ain in Remarks)
3Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must be	e presen	t, unless disturbe	d or problematic.	
Restrictive L	ayer (if observed):								
	Type:		None			Hydric	Soil Present?		Yes/_ No
	Depth (inches):			•		1			
Remarks:						Į			-
_	ntly disturbed as a ling or grading.	a result d	of tilling. Soil distu	urbe	d, althoug	gh not si	gnificantly enougl	h to obscure hydi	ric soil indicators, as a result of

Hydrology Photos



Vegetation Photos





Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	ject	City/County: Spr	akers, Montgomery County	<u> </u>	Sampling Date: 2021-Sept-16		
Applicant/Owner: SunEast			State: NY	S	ampling Point: W-JMF	P-30_UPL-1	
Investigator(s): _ Jerry Peake, Ste	eve Spotts, Abi Ligh	t	Section, Township,	Range: NA			
Landform (hillslope, terrace, etc.)	: Flat		Local relief (concave, conv	/ex, none): N	Vone	Slope (%): 1 to 3	
Subregion (LRR or MLRA): L	RR L		Lat: 42.857353	Long:	74.52095	Datum: WGS84	
Soil Map Unit Name: Madalin	silty clay loam, Ma				NWI classification	: None	
Are climatic/hydrologic condition	s on the site typica	l for this time of ye	ear? Yes No	_ ∠ (If no, e	explain in Remarks.)		
Are Vegetation <u></u> ✓, Soil <u>✓</u> ,	or Hydrology _	significantly di	sturbed? Are "Norm	al Circumsta	inces" present? Y	′es No _	
Are Vegetation, Soil,	or Hydrology _	naturally prob	lematic? (If needed,	explain any	answers in Remarks.)		
SUMMARY OF FINDINGS – A	ttach site map s	showing sampli	ng point locations, tra	nsects, imp	oortant features, e	tc.	
Hydrophytic Vegetation Present	? Yes _	No _ _ _					
Hydric Soil Present?	Yes _	No _ _ /	Is the Sampled Area withi	n a Wetland?	? Yes	No <u>_</u>	
Wetland Hydrology Present?	Yes _	No _ _ _	If yes, optional Wetland S	ite ID:			
Remarks: (Explain alternative pro							
•		•					
Covertype is UPL. Area is upland			e present. Circumstances a	are not norm	ial due to agricultural i	activities. Heavy	
precipitation day/night prior to o	data plot collection	•					
	'						
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of	one is required; ch	eck all that apply)		Secondary	Indicators (minimum o	of two required)	
See See See Markey (AA)		Matan Chain and La	(DO)	Surface	Soil Cracks (B6)		
Surface Water (A1)		Water-Stained Le		Drainag	ge Patterns (B10)		
High Water Table (A2)		_ Aquatic Fauna (B		Moss Tr	rim Lines (B16)		
Saturation (A3) Water Marks (B1)		Marl Deposits (B1		Dry-Sea	son Water Table (C2)		
		Hydrogen Sulfide		Crayfish	n Burrows (C8)		
Sediment Deposits (B2)			heres on Living Roots (C3)	Saturati	ion Visible on Aerial Im	nagery (C9)	
Drift Deposits (B3)		Presence of Redu		Stunted	l or Stressed Plants (D	1)	
Algal Mat or Crust (B4)		="	ction in Tilled Soils (C6)		rphic Position (D2)		
Iron Deposits (B5)		Thin Muck Surfac			Aquitard (D3)		
Inundation Visible on Aerial I	magery (B7)	Other (Explain in	Remarks)		pographic Relief (D4)		
Sparsely Vegetated Concave	Surface (B8)				utral Test (D5)		
5.1101				FAC-NE	utrai rest (D3)		
Field Observations: Surface Water Present?	Yes No	/ Denth	(inches):				
Water Table Present?		•		- Motland III	idrology Drocont?	Vos No 4	
	Yes No _		(inches):	- weuand Hy	ydrology Present?	Yes No	
Saturation Present?	Yes No _	<u>/</u> Depth	(inches):	-			
(includes capillary fringe)							
Describe Recorded Data (stream	ngauge, monitoring	well, aerial photo	s, previous inspections), if	available:			
•	0 0,	, ,	.,				
Remarks:							
The criterion for wetland hydrol	aguis not mot No	nacitiva indication	of watland budralaguage	absaniad			
The criterion for wetland hydron	ogy is not met. No p	positive indication	of wedand flydrology was	observed.			

				T			
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant		0	(4)
1.				Are OBL, FACW, or FAC	: :	U	(A)
2.				Total Number of Dom	inant Species		
-				Across All Strata:	•	1	(B)
3				Percent of Dominant S	Species That		
4				Are OBL, FACW, or FAC	•	0	(A/B)
5				Prevalence Index work		-	
6.				Total % Cove		Multiply	Rv.
7				- OBL species	0	x 1 =	0
	0	= Total Cove	er	FACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size:15 ft)	<u></u>	=		·		•	-
1.				FAC species	10	x 3 =	30
2.				FACU species	5	x 4 =	20
3.				- UPL species	75	x 5 =	375
				- Column Totals	90	(A)	425 (B)
4				Prevalence I	ndex = B/A =	4.7	
5				Hydrophytic Vegetatio	n Indicators		<u> </u>
6.				1- Rapid Test for		/ogotatio	
7				· ·		regetatioi	1
	0	= Total Cove	er	2 - Dominance Te			
Herb Stratum (Plot size: <u>5 ft</u>)	<u>-</u>	_		3 - Prevalence In			
1. Zea mays	75	Yes	UPL	4 - Morphologica			supporting
2. Ranunculus repens	10	No	FAC	data in Remarks or on	•		
•				- Problematic Hyd	. , .		
- -71		No	FACU	Indicators of hydric se		-	gy must be
4				present, unless distur	oed or problei	matic	
5				Definitions of Vegetati	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	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.	
				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11				size, and woody plants	-		
				Woody vines - All woo	dy vines great	ter than 3	.28 ft in
12				height.	, ,		
	90	= Total Cove	er	Hydrophytic Vegetation	on Drocont?	/oc	vlo. /
Woody Vine Stratum (Plot size: 30 ft)				nyuropnyuc vegetati	on Present:	les I	40 <u>v</u>
1				_			
2				_ [
3.							
4.				-			
-		= Total Cove	er e	=			
	-						
Remarks: (Include photo numbers here or on a se	•						
Active agricultural field. No positive indication of h	nydrophytic veg	etation was o	observed (≥	≥50% of dominant speci	es indexed as	FAC- or o	lrier).

	•	to the d	•			indicato	r or confirm the al	bsence of indicators	s.)
Depth	Matrix		Redox			12	T		Para andra
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks
0 - 16	10YR 3/1	100					Clay Loa		
16 - 20	10YR 2/1	85	5YR 4/6	15	C	M	Clay Loa	<u>m</u>	
						·			
¹Tvpe: C = 0	Concentration, D =	Depleti	on. RM = Reduced	d Mat	rix. MS =	Masked	Sand Grains. ² Le	ocation: PL = Pore L	ining. M = Matrix.
	Indicators:		,		,				blematic Hydric Soils ³ :
Histoso			Polyvalue Be	low S	urface (9	(8) (I RR	R, MLRA 149B)		•
	pipedon (A2)		Thin Dark Su						10) (LRR K, L, MLRA 149B)
	istic (A3)		Loamy Muck						Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye	-		(=::::,	-,	•	eat or Peat (S3) (LRR K, L, R)
	ed Layers (A5)		Depleted Ma					Dark Surface (
	ed Below Dark Surf	ace (A1							ow Surface (S8) (LRR K, L)
Thick D	ark Surface (A12)		Depleted Da	rk Su	rface (F7)		Thin Dark Surf	
Sandy N	Mucky Mineral (S1)		Redox Depre	ession	ıs (F8)			•	ese Masses (F12) (LRR K, L, R)
Sandy (Gleyed Matrix (S4)								odplain Soils (F19) (MLRA 149B)
Sandy I	Redox (S5)							•	(TA6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)							Red Parent Ma	
	urface (S7) (LRR R, I	MLRA 14	19B)						Dark Surface (TF12)
	,		•					Other (Explain	in Remarks)
3Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	d or problematic.	
Restrictive	Layer (if observed)	:							
	Type:		None	_		Hydric	Soil Present?	Yes	No / _
	Depth (inches):								
Remarks:									
Soil signific	antly disturbed as	a result	of tilling.						
	,		Ü						

Vegetation Photos





Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	<u>/</u> S	Sampling Date: 2021-Sept-17			
Applicant/Owner: SunEast			State: NY	San	Sampling Point: W-JMP-31_UPL-1			
Investigator(s): Jerry Peake, Steve Spotts, Abi Light Section, Township, Range: NA								
Landform (hillslope, terrace, etc.)	: Hillslope		Local relief (concave, conv	/ex, none): No	ne	Slope (%): 2 to 5		
Subregion (LRR or MLRA): L	RR L		Lat: 42.852900816	57 Long: -74	I.5141566474	Datum: WGS84		
Soil Map Unit Name: Darien si	lt loam, DaB				NWI classification:	: None		
Are climatic/hydrologic condition	s on the site typica	al for this time of year	ar? Yes No	_ ∠ (If no, exp	olain in Remarks.)			
Are Vegetation, Soil,	or Hydrology _	significantly dis	sturbed? Are "Norm	al Circumstano	es" present? Y	es No _ _/		
Are Vegetation, Soil,	or Hydrology _	naturally probl	ematic? (If needed,	explain any ar	nswers in Remarks.)			
SUMMARY OF FINDINGS – A	ttach site map	showing samplir	ng point locations, trai	nsects, impo	rtant features, e	tc.		
Hydrophytic Vegetation Present	-	No	1	<u> </u>				
			la tha Canania d Anaa with	.: \A/-+ 7	V	No. 7		
Hydric Soil Present?		✓_ No	Is the Sampled Area with		tes .	No/_		
Wetland Hydrology Present?	Yes _	No _ _ _	If yes, optional Wetland	Site ID:				
Remarks: (Explain alternative pr	ocedures here or in	n a separate report)						
Covertype is UPL. Area is upland	l, not all three wetl	and parameters are	present. Circumstances a	are not normal	due to mowing of v	egetation.		
Circumstances are not normal d	ue to agricultural a	activities.						
	ac to a6ca.ta.a.							
HYDROLOGY								
TIDROLOGI								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of	one is required; ch	neck all that apply)		Secondary Inc	dicators (minimum o	of two required)		
C. 1952 10/25 - 1 (A.1)		\\/_+ C+=:= - -=	(DO)	Surface So	oil Cracks (B6)			
Surface Water (A1)		_ Water-Stained Lea		Drainage	Patterns (B10)			
High Water Table (A2)		_ Aquatic Fauna (B1		Moss Trim	Lines (B16)			
Saturation (A3) Water Marks (B1)		_ Marl Deposits (B1		Dry-Season Water Table (C2)				
		_ Hydrogen Sulfide		Crayfish Burrows (C8)				
Sediment Deposits (B2)			neres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)		_ Presence of Reduc		Strinted or Stressed Plants (1)1)				
Algal Mat or Crust (B4)	_	='	tion in Tilled Soils (C6)	Geomorpl	hic Position (D2)			
Iron Deposits (B5)		_ Thin Muck Surface	Shallow Adultard (113)					
Inundation Visible on Aerial I		_ Other (Explain in F	Remarks)		ographic Relief (D4)			
Sparsely Vegetated Concave	Surface (B8)				ral Test (D5)			
Field Observations:								
Surface Water Present?	Yes No _	✓ Depth ((inches):					
		·	· · · · · · · · · · · · · · · · · · ·	-	mala m. Duana m#2	Voc. No. 4		
Water Table Present?	Yes No _		(inches):	- welland Hydi	rology Present?	Yes No		
Saturation Present?	Yes No _	<u>✓</u> Depth ((inches):	_				
(includes capillary fringe)								
Describe Recorded Data (stream	n gauge, monitorin	g well, aerial photos	s, previous inspections), if	available:				
	00.,	6	,, ,					
Remarks:								
The criterion for wetland hydrol	ogy is not met.							

				1		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:	Tl 4	
1.	% Cover	Species?	Status	Number of Dominant Species Are OBL, FACW, or FAC:	o o	(A)
2.				Total Number of Dominant Spe	ecies	
3.	·	 -		Across All Strata:	1	(B)
4.	. ———			Percent of Dominant Species T	hat 0	(A/B)
5.				Are OBL, FACW, or FAC:		(A/B)
6.				Prevalence Index worksheet:		
7.				Total % Cover of:	<u>Multiply</u>	<u>/ By:</u>
··	0	= Total Cov	or	OBL species 5	x 1 =	5
Sapling/Shrub Stratum (Plot size:15 ft)		- Total Cov	Ci	FACW species 0	x 2 =	0
1.				FAC species 30	x 3 =	90
2.	· ——			FACU species 90	x 4 =	360
3.				UPL species 0	x 5 =	0
·				Column Totals 125	(A)	455 (B)
4				Prevalence Index = E	/A = <u>3.6</u>	<u></u>
5.	·			Hydrophytic Vegetation Indica	ors:	
6.	·			1- Rapid Test for Hydroph	ytic Vegetatio	n
7				2 - Dominance Test is > 5)%	
	0	= Total Cov	er	3 - Prevalence Index is ≤	3.0¹	
Herb Stratum (Plot size: <u>5 ft</u>)		.,		4 - Morphological Adapta	tions¹ (Provide	supporting
1. Holcus lanatus	90	Yes	FACU	data in Remarks or on a separa	ate sheet)	
2. Rumex crispus	20	<u>No</u>	FAC	Problematic Hydrophytic	Vegetation¹ (E	xplain)
3. Echinochloa crus-galli	10	<u>No</u>	FAC	¹Indicators of hydric soil and w	etland hydrolo	ogy must be
4. Persicaria hydropiper	5	<u>No</u>	OBL	present, unless disturbed or p	oblematic	
5				Definitions of Vegetation Strate	a :	
6				Tree – Woody plants 3 in. (7.6 d	m) or more in	diameter at
7				breast height (DBH), regardles	_	
8				Sapling/shrub – Woody plants		DBH and
9				greater than or equal to 3.28 f		
10				Herb – All herbaceous (non-wo		egardless of
11				size, and woody plants less tha		20 ft :-
12				Woody vines – All woody vines height.	greater than a	3.28 IL III
	125	= Total Cov	er			
Woody Vine Stratum (Plot size:30 ft)				Hydrophytic Vegetation Prese	nt? Yes	No <u>/</u>
1						
2						
3						
4						
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a separat	te sheet \			_		
No positive indication of hydrophytic vegetation was ol		50% of dom	inant snecie	es indexed as FAC – or drier)		
The positive indication of flydrophytic vegetation was of	0361 VEG (2	30 % Of GOIT	illiant specie	es indexed as the of difer).		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox	c Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0 - 10	10YR 3/2	100					Silty Clay Loam		
10 - 16	10YR 4/2	60	10YR 4/6	10	С	M	Silty Clay Loam		
10 - 16	10YR 3/2	30				·	Silty Cla	ay Loam	
16 - 20	10YR 4/3	90	10YR 5/6	10	С	M	Clay l	Loam	
-									
_				_				_	
<u> </u>	-								
				_					
-						 .			
	Concentration, D =	Depletion	on, RM = Reduced	l Matı	rix, MS =	Masked	Sand Grains. ² L		Lining, M = Matrix.
	Indicators:							Indicators for Pi	roblematic Hydric Soils³:
Histoso							R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Su					Coast Prairie	e Redox (A16) (LRR K, L, R)
	listic (A3)		Loamy Muck	-		(LRR K, L	_)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
-	gen Sulfide (A4)		Loamy Gleye					Dark Surface	e (S7) (LRR K, L)
	ed Layers (A5)	(444	_ <u> /</u> Depleted Ma					Polyvalue Be	elow Surface (S8) (LRR K, L)
	ed Below Dark Surf Oark Surface (A12)	ace (ATI	Depleted Da					Thin Dark Su	urface (S9) (LRR K, L)
	Mucky Mineral (S1)		Redox Depre					Iron-Mangar	nese Masses (F12) (LRR K, L, R)
_	-		Redox Depre	522101	IS (FO)			Piedmont Fl	oodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
-	Redox (S5)							Red Parent I	Material (F21)
	ed Matrix (S6)							Very Shallov	v Dark Surface (TF12)
Dark S	urface (S7) (LRR R, N	MLRA 14	9B)					Other (Expla	ain in Remarks)
3Indicators	s of hydrophytic veg	getation	and wetland hyd	rology	/ must be	e presen	t, unless disturbe	ed or problematic.	
-	Layer (if observed)		,	- 0.	,	İ	,	'	
	Type:		None			Hydric	Soil Present?		Yes _ 🗸 No
	Depth (inches):					1.,,			
Domarka	Deptil (iliches).								
Remarks:	indication of hydric	· soil wa	s observed. The c	riterio	n for hy	dric soil i	is met		
A positive	indication of riguric	. SOII Was	s observed. The c	riterio	il loi liye	aric son i	is friet.		
]									

Vegetation Photos





Photo of Sample Plot East



Photo of Sample Plot West



Project/Site: Flat Creek Sola	r Project	City/County: Spra	kers, Montgomery County	y Sampling Date: 2021-Sept-17				
Applicant/Owner: SunEas	t		State: NY	Sampl	ling Point: W-JMP-:	31_UPL-2		
Investigator(s): Jerry Peak	e, Steve Spotts, Abi Ligh	nt	Section, Township,	Range: NA				
Landform (hillslope, terrace,	etc.): Flat	_	Local relief (concave, conv	ex, none): None		Slope (%): 1 to 3		
Subregion (LRR or MLRA):	LRR L		Lat: 42.853365727	1 Long: -74.5	153211901 D	Datum: WGS84		
Soil Map Unit Name: Mad	alin silty clay loam, Ma				NWI classification:	None		
Are climatic/hydrologic cond	itions on the site typica	l for this time of ye	ar? Yes No	(If no, expla	in in Remarks.)			
Are Vegetation _ ✓, Soil _	✓, or Hydrology _	significantly dis		al Circumstances		s No _ _ /_		
Are Vegetation, Soil _		naturally probl		explain any ansv	vers in Remarks.)			
-								
CLIMMADY OF EINDING	Attach cita man	chowing campli	ag noint locations tran	socts import	ant foatures et	_		
SUMMARY OF FINDINGS	5 - Attach site map	SHOWING Sampin	ig point locations, trai	isects, importa	ant reatures, etc			
Hydrophytic Vegetation Pre	sent? Yes	No _ _ _						
Hydric Soil Present?	Yes.	No _ _ _	Is the Sampled Area withir	n a Wetland?	Yes _	No <u>_</u>		
Wetland Hydrology Present	? Yes	No _ _ _	If yes, optional Wetland Si	te ID:				
				te 15.	·			
Remarks: (Explain alternativ	•							
Covertype is UPL. Area is up		•	•			getation.		
Circumstances are not norn	nal due to agricultural a	activities. Heavy pre	cipitation 2 days prior to da	ata plot collectio	n.			
	-							
HYDROLOGY								
Wetland Hydrology Indicato	rc.							
		1 11/1 / 13				c		
Primary Indicators (minimu	m of one is required; cr	<u>neck all that apply)</u>		-	ators (minimum of	two required)		
Surface Water (A1)		_ Water-Stained Lea	aves (B9)	Surface Soil	Cracks (B6)			
High Water Table (A2)		_ Aquatic Fauna (B1		Drainage Pat	tterns (B10)			
Saturation (A3)		_ Marl Deposits (B1		Moss Trim Li	nes (B16)			
Water Marks (B1)		_ Hydrogen Sulfide		Dry-Season Water Table (C2)				
Sediment Deposits (B2)			neres on Living Roots (C3)	Crayfish Bur	rows (C8)			
			•	Saturation V	isible on Aerial Ima	agery (C9)		
Drift Deposits (B3)		_ Presence of Redu		Stunted or S	tressed Plants (D1))		
Algal Mat or Crust (B4)	_		ction in Tilled Soils (C6)	Geomorphic	Position (D2)			
Iron Deposits (B5)		_ Thin Muck Surface		Shallow Aqu				
Inundation Visible on Ae	rial Imagery (B7)	_ Other (Explain in F	Remarks)	•	aphic Relief (D4)			
Sparsely Vegetated Cond	ave Surface (B8)			FAC-Neutral				
Field Observations				TAC-Neutral	1630 (D3)			
Field Observations:								
Surface Water Present?	Yes No _	<u>✓</u> Depth	(inches):					
Water Table Present?	Yes No _	✓ Depth	(inches):	Wetland Hydrol	ogy Present?	Yes No ∠		
Saturation Present?	Yes No _	./ Denth	(inches):					
	165 110 _	у Берин						
(includes capillary fringe)								
Describe Recorded Data (st	ream gauge, monitoring	g well, aerial photos	s, previous inspections), if a	available:				
Remarks:								
The criterion for wetland hy	drology is not met.							
,	67							

% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC	•	0	(A)
				•	U	(7 ()
			Total Number of Domir			(D)
			Across All Strata:		2	(B)
			Percent of Dominant S	pecies That	0	(A/B)
			Are OBL, FACW, or FAC	:		(A/D)
			Prevalence Index work	sheet:		
			Total % Cover	of:	<u>Multiply</u>	<u>By:</u>
	- Total Cove	\r	OBL species	0	x 1 =	0
	_ TOTAL COVE	:1	FACW species	0	x 2 =	0
			FAC species	15	x 3 =	45
			FACU species	130	x 4 =	520
			- UPL species	5	x 5 =	25
			Column Totals	150	(A)	590 (B)
			Prevalence Ir	ndex = B/A =	3.9	
			Hydrophytic Vegetation	n Indicators:		.,
			1, , ,		egetatior	1
			· ·		.0	
0	= Total Cove	er				
					(Provide	supporting
90	Yes	FACU		•	-	
30	Yes	FACU	Problematic Hydr	ophytic Vege	tation¹ (E	kplain)
15	No	FAC	¹Indicators of hydric so	il and wetlan	d hydrolo	gy must be
10	No	FACU	present, unless disturb	ed or probler	matic	-
5	No	UPL	Definitions of Vegetation	on Strata:		
			Tree – Woody plants 3	in. (7.6 cm) or	more in	diameter at
			breast height (DBH), re	gardless of h	eight.	
			Sapling/shrub – Woody	plants less th	han 3 in. l	DBH and
						gardless of
			-	dy vines great	er than 3	.28 ft in
150	= Total Cove	er				
	-		Hydrophytic Vegetatio	n Present? \	/es l	Vo <u> </u>
			-			
0	= Total Cove	r	-			
	90 30 15 10 5	0 = Total Cove 90 Yes 30 Yes 15 No 10 No 5 No	0 = Total Cover 90 Yes FACU 30 Yes FACU 15 No FAC 10 No FACU 5 No UPL	OBL species FACW species FACU species FACU species UPL species Column Totals Prevalence In Hydrophytic Vegetation 1- Rapid Test for H 2 - Dominance Te 3 - Prevalence Inc 4 - Morphological data in Remarks or on Problematic Hydr 11ndicators of hydric so present, unless disturb Tree – Woody plants 3 breast height (DBH), re Sapling/shrub – Woody greater than or equal t Herb – All herbaceous size, and woody plants Woody vines – All wood height.	Table 2	OBL species 0 x 1 = FACW species 0 x 2 = FAC species 15 x 3 = FACU species 5 x 5 = Column Totals 150 (A) Prevalence Index = B/A = 3.9 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is > 50% 3 - Prevalence Index is ≤ 3.0¹ 4 - Morphological Adaptations¹ (Provide data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (E) No FACU No FACU No UPL Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. I greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, resize, and woody vines greater than 3 height.

	•	to the d	•			ndicato	or confirm the al	bsence of indicators.)		
Depth _	Matrix	04	Redox			Loc2	Tout			Domarko
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Text			Remarks
0 - 15	10YR 3/2	100	7.5VD 4/6	4.5			Silty Cla			
15 - 20	10YR 4/2	85	7.5YR 4/6	15	C	M	Silty Cla	y Loam		
		-		_						
-										
-										
-										
¹Type: C = (Concentration, D =	Depletion	on, RM = Reduced	Mati	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Lin	ng, M = N	Matrix.
Hydric Soil		'			<u> </u>			Indicators for Proble	_	
Histoso			Polvvalue Be	low S	urface (S	8) (LRR	R, MLRA 149B)		-	
	pipedon (A2)		Thin Dark Su					2 cm Muck (A10)		
	istic (A3)		Loamy Muck					Coast Prairie Re		
	en Sulfide (A4)		Loamy Gleye	-		. ,	•	5 cm Mucky Pea		
Stratifie	ed Layers (A5)		Depleted Ma	trix (l	- 3)			Dark Surface (S7 Polyvalue Below		
Deplete	ed Below Dark Surf	ace (A11) Redox Dark	Surfa	ce (F6)			Thin Dark Surface		
	ark Surface (A12)		Depleted Da					Iron-Manganese		
Sandy N	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)					s (F19) (MLRA 149B)
Sandy 0	Gleyed Matrix (S4)							Mesic Spodic (TA		
Sandy F	Redox (S5)							Red Parent Mate		
Strippe	d Matrix (S6)							Very Shallow Da		
Dark Su	ırface (S7) (LRR R, N	MLRA 14	9B)					Other (Explain in		
								•	i Kemaiks	5)
-	of hydrophytic veg		and wetland hyd	rolog	y must be	e preser	it, unless disturbe	d or problematic.		
Restrictive	Layer (if observed)	:								
	Type:		None			Hydric	Soil Present?	Yes	No	
	Depth (inches):									
Remarks:										
No positive	indication of hydr	ic soils v	vas observed.							

Vegetation Photos



Soil Photos



Photo of Sample Plot East



Photo of Sample Plot South



Project/Site: Flat Creek Solar Pro	oject City/County: Spra	akers, Montgomery	Sampling Date: 2021-Aug-16			
Applicant/Owner: SunEast		State: NY	Sampling Point:	W-KCF-01_PSS-1		
Investigator(s): Kevin Fergusor	ı , Brian Corrigan	Section, Township,	Range: NA			
Landform (hillslope, terrace, etc.)	: Flood Plain	Local relief (concave, conv	ex, none): Concave	Slope (%): 5 to 10		
Subregion (LRR or MLRA):	RR R	Lat: 42.89196262	Long: -74.49732032	Datum: WGS84		
Soil Map Unit Name: RLF - Roo	k outcrop-Farmington association, ve	ry steep	NWI classi	fication: None		
Are climatic/hydrologic condition	s on the site typical for this time of ye	ear? Yes <u>✓</u> No	(If no, explain in Rem	arks.)		
Are Vegetation, Soil,	or Hydrology significantly di	sturbed? Are "Norm	al Circumstances" present?	Yes No		
Are Vegetation, Soil,	or Hydrology naturally prob	lematic? (If needed,	explain any answers in Rer	marks.)		
SUMMARY OF FINDINGS – A	attach site map showing sampli	ng point locations, trar	nsects, important featu	ires, etc.		
Hydrophytic Vegetation Present	i	l I	·			
		lasta Camadad Amaa mitt		Voc. 4 No.		
Hydric Soil Present?	Yes No	Is the Sampled Area withi		Yes No		
Wetland Hydrology Present?	Yes _ ✓ No	If yes, optional Wetland S	ite ID:	W-KCF-01		
eoverge is 1 55.7 near 5 wearing	d, all three wetland parameters are pi	Cocini.				
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 I	Presence of Redu Recent Iron Reduc Thin Muck Surfact magery (B7) Other (Explain in I	aves (B9) 13) 5) Odor (C1) heres on Living Roots (C3) iced Iron (C4) ction in Tilled Soils (C6) e (C7)	Secondary Indicators (min Surface Soil Cracks (B6 Drainage Patterns (B16) Moss Trim Lines (B16) Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on A Stunted or Stressed Pla Geomorphic Position (Shallow Aquitard (D3) Microtopographic Relie FAC-Neutral Test (D5)	e (C2) erial Imagery (C9) ants (D1) D2)		
Field Observations:						
Surface Water Present?	·	(inches):				
Water Table Present?	Yes No Depth	(inches):	Wetland Hydrology Preser	nt? Yes No		
Saturation Present?	Yes <u></u> ✓ No Depth	(inches): 0				
(includes capillary fringe)			•			
Describe Recorded Data (stream	n gauge, monitoring well, aerial photo	s, previous inspections), if a	available:			
Remarks: The criterion for wetland hydrol	ogy is met.					

VEGETATION - 03e scientific flames of plants.				T		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:		
	% Cover	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
1. Carya ovata				Total Number of Dominant Species		
2. Acer saccharum	2	Yes	FACU	Across All Strata:	´ 5	(B)
3.				Percent of Dominant Species That		
4.	·			Are OBL, FACW, or FAC:	40	(A/B)
5.	· ——			Prevalence Index worksheet:		
6.				Total % Cover of:	Multiply	By:
7				OBL species 0	x 1 =	0
	7	_= Total Cov	er	FACW species 30	x 2 =	60
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species 25	x 3 =	75
1. Carpinus caroliniana	15	Yes	FAC	FACU species 12	x 4 =	48
2. <i>Tilia americana</i>	5	Yes	FACU	UPL species 0	x 5 =	0
3				Column Totals 67	(A)	183 (B)
4.				Prevalence Index = B/A =	- ' ' -	(-)
5				-		
6				Hydrophytic Vegetation Indicators 1 Rapid Test for Hydrophytic		
7				2 - Dominance Test is > 50%	vegetation	ı
	20	= Total Cov	er	2 - Dominance Test is > 50% 3 - Prevalence Index is ≤ 3.01		
Herb Stratum (Plot size: <u>5 ft</u>)					o1 (Drovido	supporting
1. <i>Impatiens capensis</i>	30	Yes	FACW	4 - Morphological Adaptation data in Remarks or on a separate		supporting
2. Athyrium angustum	5	No	FAC	Problematic Hydrophytic Veg		(nlain)
3. <i>Urtica dioica</i>	5	No	FAC	Indicators of hydric soil and wetla	-	
4.				present, unless disturbed or probl	,	gy must be
5.				Definitions of Vegetation Strata:		
6.	-			Tree – Woody plants 3 in. (7.6 cm)	or more in (diameter at
7.				breast height (DBH), regardless of		didifficter de
8.				Sapling/shrub – Woody plants less	-	OBH and
9.	· ——			greater than or equal to 3.28 ft (1)		
10.	· ·			Herb – All herbaceous (non-wood)		gardless of
11.				size, and woody plants less than 3		_
12.	· ——			Woody vines – All woody vines gre	ater than 3.	.28 ft in
	40	= Total Cov	or	height.		
Woody Vine Stratum (Plot size:30 ft)		_ Total Cov	Ci	Hydrophytic Vegetation Present?	Yes _ ✓ _ N	lo
1.						
2.	· ——					
3.						
4		Tatal Car				
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a separa	te sheet.)					
A positive indication of hydrophytic vegetation was ob	served (Pre	valence Ind	$ex is \leq 3.00$).		

Profile Description: (Describe to the	•			ndicator	or confirm the ab	osence of indicato	ors.)
Depth Matrix	Redox						
(inches) Color (moist) %	Color (moist)	<u>%</u>	Type ¹	Loc ²	Textu		Remarks
0 - 6 10YR 3/2 100	<u> </u>				Silty Clay	/ Loam	
	_						
	_,						
	_	_					
	- ·						-
	<u> </u>	_					
		_					
	<u> </u>	_					
		_					
	<u> </u>	_					
	_,						
¹ Type: C = Concentration, D = Deple	tion, RM = Reduced	Matri	ix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil Indicators:						Indicators for P	roblematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Bel	ow Su	ırface (S	8) (LRR I	R, MLRA 149B)		(A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	Thin Dark Sur						e Redox (A16) (LRR K, L, R)
Black Histic (A3)	Loamy Mucky						Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)	Loamy Gleye					-	e (S7) (LRR K, L)
Stratified Layers (A5)	_✓ Depleted Mat	rix (F	3)				elow Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A	11) Redox Dark S	urface	e (F6)			,	
Thick Dark Surface (A12)	Depleted Dar	k Surf	face (F7)				urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)	Redox Depre	ssions	s (F8)				
Sandy Gleyed Matrix (S4)							loodplain Soils (F19) (MLRA 149B)
Sandy Redox (S5)						•	ic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6)						Red Parent	
Dark Surface (S7) (LRR R, MLRA 1	149B)						w Dark Surface (TF12)
	,					Other (Expla	ain in Remarks)
³ Indicators of hydrophytic vegetatio	n and wetland hydr	ology	must be	presen	t, unless disturbe	d or problematic.	
Restrictive Layer (if observed):							
Type:	None			Hydric	Soil Present?		Yes No
Depth (inches):							
Remarks:							
A positive indication of hydric soil w	as observed. Refusa	al due	to coar	se fragm	ents.		

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Project/Site:	oject	City/County: Spra	kers, Montgomery	Sampling	Date: 2021-Aug-16
Applicant/Owner: SunEast		_	State: NY	Sampling P	oint: W-KCF-01_UPL-1
Investigator(s): Kevin Ferguson	າ , Brian Corrigan	l	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.): Hillslope		Local relief (concave, conv	rex, none): Convex	Slope (%): 15 to 20
Subregion (LRR or MLRA):	.RR R		Lat: 42.89186612	Long: -74.497356	Datum: WGS84
Soil Map Unit Name: RLF - Ro	k outcrop-Farmir	ngton association, ver	y steep	NWI c	lassification: None
Are climatic/hydrologic conditior	is on the site typic	cal for this time of yea	ar? Yes <u></u> ✓ No	(If no, explain in	Remarks.)
Are Vegetation, Soil,	or Hydrology	significantly dis	turbed? Are "Norm	al Circumstances" pres	sent? Yes 🟒 No
Are Vegetation, Soil,	or Hydrology	naturally proble	ematic? (If needed,	explain any answers i	n Remarks.)
Hydrophytic Vegetation Present Hydric Soil Present?	? Yes	5 No _ _	Is the Sampled Area with	in a Wetland?	eatures, etc. Yes No
Wetland Hydrology Present? Remarks: (Explain alternative pr	•	s No / _	If yes, optional Wetland	site id:	
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 Lea	vos (RQ)	Surface Soil Crack	.s (B6)
Surface Water (A1) High Water Table (A2)	-	Water-Stained Lea Aquatic Fauna (B1:		Drainage Patterns	; (B10)
Saturation (A3)	-	Marl Deposits (B15		Moss Trim Lines (I	
Water Marks (B1)	_	Hydrogen Sulfide (Dry-Season Water	
Sediment Deposits (B2)	_		eres on Living Roots (C3)	Crayfish Burrows	
Drift Deposits (B3)	-	Presence of Reduc	ed Iron (C4)	Saturation visible Stunted or Stresse	on Aerial Imagery (C9)
Algal Mat or Crust (B4)	-	Recent Iron Reduc	tion in Tilled Soils (C6)	Geomorphic Posit	
Iron Deposits (B5)	-	Thin Muck Surface	• •	Shallow Aquitard	
Inundation Visible on Aerial		Other (Explain in R	temarks)	Microtopographic	
Sparsely Vegetated Concave	Surface (B8)			FAC-Neutral Test (
Field Observations:	-				
Surface Water Present?	Yes No	Depth (inches):		
Water Table Present?	Yes No	Depth (inches):	- Wetland Hydrology P	resent? Yes No
Saturation Present?	Yes No		inches):		•
(includes capillary fringe)	165 140	<u>v</u> bepair(-	
Describe Recorded Data (stream					<u> </u>
Remarks: No positive indication of wetlan					

Tree Stratum (Plot size:30 ft)		Dominant		Dominance Test worksheet:		
		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
1. Acer saccharum	5	Yes	FACU	Total Number of Dominant Species		
2. Fraxinus americana	5	Yes	FACU	Across All Strata:	7	(B)
3				Percent of Dominant Species That	-	
4				Are OBL, FACW, or FAC:	42.9	(A/B)
5				Prevalence Index worksheet:		
6				Total % Cover of:	Multiply E	lv:
7				OBL species 0	x 1 =	0
	10	= Total Cov	er	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 15	x 3 =	45
1. <i>Fraxinus americana</i>	60	Yes	FACU	FACU species 95	x 4 =	380
2. Fagus grandifolia	10	No	FACU	UPL species 0	x 5 =	0
3. Acer saccharum	5	No	FACU	Column Totals 110	(A)	425 (B)
4. Hamamelis virginiana	5	No	FACU	Prevalence Index = B/A =	3.9	423 (b)
5				-		
6.				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic	Vegetation	
	80	= Total Cov	er	2 - Dominance Test is > 50%		
Herb Stratum (Plot size:5 ft)		-		3 - Prevalence Index is ≤ 3.01	4.00	
1. Athyrium angustum	5	Yes	FAC	4 - Morphological Adaptations	-	upporting
2. Urtica dioica		Yes	FAC	 data in Remarks or on a separate sl Problematic Hydrophytic Vege 		lain)
3. Trillium cernuum	5	Yes	FAC	Indicators of hydric soil and wetlar		-
4. <i>Tiarella cordifolia</i>	5	Yes	FACU	present, unless disturbed or proble	, .	y must be
5.				Definitions of Vegetation Strata:	matic	
6.				Tree – Woody plants 3 in. (7.6 cm) o	r mara in d	iameter at
7.				breast height (DBH), regardless of h		iairietei at
8.				Sapling/shrub – Woody plants less t	-	BH and
9.				greater than or equal to 3.28 ft (1 m		
10.				Herb – All herbaceous (non-woody)		ardless of
11.				size, and woody plants less than 3.2		
12.				Woody vines – All woody vines grea	ter than 3.2	28 ft in
12.	20	= Total Cov	or	height.		
Woody Vine Stratum (Plot size: 30 ft)		- Total Cov	CI	Hydrophytic Vegetation Present?	Yes No	
1.						
2.						
3.				·		
3 4.				•		
4.				-		
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a sep						
No positive indication of hydrophytic vegetation w	as observed (≥	50% of don	ninant speci	es indexed as FAC– or drier).		

Profile Des	cription: (Describe	to the de	pth needed to do	cun	nent the i	ndicato	r or confirm the a	absence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	ture	Remarks
0 - 6	10YR 3/2	100					Silty Cla	ay Loam	
				_			-		
				_			-		
				_					
				_					
				_					
	-			_			-		
				_					
				_			-	_	
1Type: C = (Concentration, D =	Depletio	n PM = Paducad		riv MS =	Maskad	Sand Grains 21	Location: PL = Pore	Lining, M = Matrix.
Hydric Soil		- chicuo	., Reduced	···ut	٠٠٠, ١٧١٦ -	askeu	Jana Grants, -1		roblematic Hydric Soils ³ :
-			Dobarduo Pol	C	urfaca (C	O) /I DD I	D MI DA 140D)		•
Histoso	` '		Polyvalue Belo Thin Dark Sur						A10) (LRR K, L, MLRA 149B)
	pipedon (A2)						-		e Redox (A16) (LRR K, L, R)
	istic (A3) en Sulfide (A4)		Loamy Mucky Loamy Gleyed			(LKK K, I	L)		Peat or Peat (S3) (LRR K, L, R)
_ , 0	ed Layers (A5)		Loanly Gleyed Depleted Mat					Dark Surfac	
	ed Below Dark Surfa							Polyvalue Be	elow Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted Darl					Thin Dark S	urface (S9) (LRR K, L)
l ——	Mucky Mineral (S1)		Redox Depres					Iron-Manga	nese Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)		Redox Depres	3101	13 (10)			Piedmont Fl	oodplain Soils (F19) (MLRA 149B)
-	•							Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)							Red Parent	Material (F21)
	d Matrix (S6)							Very Shallov	v Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, N	/ILRA 149)B)					Other (Expla	ain in Remarks)
3Indicators	of hydrophytic veg	etation a	and wetland hydro	olog	y must be	e preser	nt, unless disturb	ed or problematic.	
Restrictive	Layer (if observed):	:							_
	Type:		None			Hydric	Soil Present?		Yes/_ No
	Depth (inches):					1			
Remarks:	Deptir (interies).					1			
	ndication of hydric	coil was	observed Potus	Ldu	o to coar	co fragn	aonto		
A positive i	ndication of riguric	SUII Was	observed, Refusa	ıuu	e to coars	se magn	ierits.		

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	ject	City/County: Spraker	s, Montgomery	Sampling Date: 2021-Aug-16			
Applicant/Owner: SunEast			State: NY	S	Sampling Point: W-KG	CF-02_PEM-1	
Investigator(s): Kevin Fergusor	າ , Brian Corrigan		Section, Township,	Range: NA			
Landform (hillslope, terrace, etc.)	: Back slope	Loc	al relief (concave, conv	/ex, none):_	Concave	Slope (%): 1 to 3	
Subregion (LRR or MLRA): L	RR R		Lat: 42.89005792	Long:_	-74.49627963	Datum: WGS84	
Soil Map Unit Name: NeC - Ne	llis loam, 8 to 15 per	cent slopes			NWI classificatio	n: None	
Are climatic/hydrologic condition		-		(If no,	explain in Remarks.)		
Are Vegetation, Soil,		significantly distur			•	Yes No	
Are Vegetation, Soil,	or Hydrology	naturally problem	atic? (If needed,	explain any	answers in Remarks	.)	
SUMMARY OF FINDINGS - A	kttach site map sl	howing sampling	point locations, tra	nsects, im	portant features,	etc.	
Hydrophytic Vegetation Present	? Yes	No					
Hydric Soil Present?		i	he Sampled Area with	in a Wetland	l? Ves	No	
		i	•				
Wetland Hydrology Present?	· · · · · · · · · · · · · · · · · · ·		es, optional Wetland S	ite ID:	VV-K	CF-02	
Remarks: (Explain alternative pro	ocedures here or in	a separate report)					
Covertype is PEM. Area is wetlar	nd, all three wetland	parameters are prese	ent.				
	,	p					
HYDROLOGY							
HIDROLOGI							
Wetland Hydrology Indicators:							
		د باسمه خمطه الم بام		C	In all and a un fan in inc.	-£*	
Primary Indicators (minimum of	one is required; che	eck all that apply)		_	Indicators (minimum	of two required)	
Surface Water (A1)	1	Water-Stained Leaves	(B9)	Surface	Soil Cracks (B6)		
High Water Table (A2)		Aquatic Fauna (B13)	(65)	Drainag	ge Patterns (B10)		
✓ Saturation (A3)		Marl Deposits (B15)		Moss Tr	rim Lines (B16)		
Water Marks (B1)		Hydrogen Sulfide Odd	or (C1)	Dry-Sea	ason Water Table (C2)		
Sediment Deposits (B2)			es on Living Roots (C3)	-	n Burrows (C8)		
Drift Deposits (B3)		Presence of Reduced	•	Saturat	ion Visible on Aerial I	magery (C9)	
· ·		Recent Iron Reduction		Stunted	l or Stressed Plants ([01)	
Algal Mat or Crust (B4)				_✓ Geomo	rphic Position (D2)		
Iron Deposits (B5)		Thin Muck Surface (C		Shallow	Aquitard (D3)		
Inundation Visible on Aerial I		Other (Explain in Rem	arks)		pographic Relief (D4)		
Sparsely Vegetated Concave	Surface (B8)				utral Test (D5)		
Field Observations:					atrai rest (D3)		
	Vos No 1	Donth (inc	has):				
Surface Water Present?	Yes No		-	-			
	Yes No	_ Depth (inc	hes):	Wetland H	ydrology Present?	Yes No	
Water Table Present?							
Water Table Present? Saturation Present?	Yes 🟒 No	Depth (inc	hes): 0				
Saturation Present?	Yes No	Depth (inc	hes): <u>0</u>	-			
Saturation Present? (includes capillary fringe)			, <u> </u>	-			
Saturation Present?			, <u> </u>	available:			
Saturation Present? (includes capillary fringe)			, <u> </u>	available:			
Saturation Present? (includes capillary fringe)			, <u> </u>	available:			
Saturation Present? (includes capillary fringe)			, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream			, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream Remarks:	n gauge, monitoring		, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream	n gauge, monitoring		, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream Remarks:	n gauge, monitoring		, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream Remarks:	n gauge, monitoring		, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream Remarks:	n gauge, monitoring		, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream Remarks:	n gauge, monitoring		, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream Remarks:	n gauge, monitoring		, <u> </u>	available:			
Saturation Present? (includes capillary fringe) Describe Recorded Data (stream Remarks:	n gauge, monitoring		, <u> </u>	available:			

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: <u>30 ft</u>)	% Cover	Species?	Status	Number of Dominant Species T Are OBL, FACW, or FAC:	hat 2	(A)
1				Total Number of Dominant Spe	ries	
2.				Across All Strata:	4	(B)
3.				Percent of Dominant Species Th	nat	
1				Are OBL, FACW, or FAC:	50	(A/B)
5				Prevalence Index worksheet:		
5				Total % Cover of:	Multiply	By:
⁷				OBL species 5	x 1 =	- J -
	0	= Total Cov	er	FACW species 30	x 2 =	60
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 10	x 3 =	30
. Rosa multiflora	10	Yes	FACU	FACU species 15	x 4 =	60
2. Fraxinus americana	5	Yes	FACU	UPL species 0	x 5 =	0
3.				Column Totals 60	^3 _	155 (B)
l				Prevalence Index = B/		133 (0)
5.		·		-		
5.				Hydrophytic Vegetation Indicate		
7.				1- Rapid Test for Hydrophy	_	
	15	= Total Cov	er	2 - Dominance Test is > 50		
Herb Stratum (Plot size:5 ft)		-		3 - Prevalence Index is ≤ 3		
1. Impatiens capensis	30	Yes	FACW	4 - Morphological Adaptat		supporting
2. Symplocarpus foetidus	5	No	OBL	data in Remarks or on a separa		
3. Asteracae	5	No	NI	Problematic Hydrophytic		
4. Persicaria virginiana	5	No	FAC	Indicators of hydric soil and we	, ,	gy must be
5.			1710	present, unless disturbed or pre		
5.				Definitions of Vegetation Strata		
7.				Tree – Woody plants 3 in. (7.6 ci	•	diameter at
				breast height (DBH), regardless Sapling/shrub – Woody plants le		DRH and
3.				greater than or equal to 3.28 ft		Di i aliu
).				Herb – All herbaceous (non-woo		ardless of
10.				size, and woody plants less that		541 41033 01
11				Woody vines – All woody vines		.28 ft in
12				height.	,	
	45	= Total Cov	er	Hydrophytic Vegetation Preser	+2 Vos / N	lo.
Noody Vine Stratum (Plot size: <u>30 ft</u>)				Trydrophytic vegetation Freser	it: 163 <u>7</u> 1	10
. <u>Vitis riparia</u>	5	Yes	FAC			
2				.		
3						
4						
	5	= Total Cov	er			

Profile Des	cription: (Describe t	o the d	lepth needed to d	ocun	nent the	indicato	or confirm the a	absence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture	Remarks
0 - 8	10YR 3/2	90	10YR 5/6	5	С	М	Silty Cla	ay Loam	
0 - 8	10YR 3/2	90	10YR 4/2	5	D	М	Silty Cla	ay Loam	
8 - 14	10YR 5/2	60		_			Sa	ind	
8 - 14	10YR 5/3	40		_				ınd	
				-					
<u> </u>				_			-		
				_					
		- —		_					
		- —		_					
¹Type: C = 0	oncentration, D = [Depleti	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² l	Location: PL = Pore	E Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pi	roblematic Hydric Soils ³ :
Histoso			Polyvalue Be	low S	Surface (S	8) (LRR	R. MLRA 149B)		•
	oipedon (A2)		Thin Dark Su						A10) (LRR K, L, MLRA 149B)
	istic (A3)		Loamy Muck						e Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye	-		(=::::4	-,	•	Peat or Peat (S3) (LRR K, L, R)
,	d Layers (A5)		Depleted Ma					Dark Surface	
	d Below Dark Surfa	ce (A1							elow Surface (S8) (LRR K, L)
	ark Surface (A12)	•	Depleted Da)			urface (S9) (LRR K, L)
	Mucky Mineral (S1)		Redox Depre					_	nese Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)				- (- /				oodplain Soils (F19) (MLRA 149B)
-	Redox (S5)							Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
-								Red Parent I	Material (F21)
	d Matrix (S6)							Very Shallov	v Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, M	LRA 14	19B)					Other (Expla	ain in Remarks)
3Indicators	of hydrophytic vege	etation	and wetland hydi	rolog	y must b	e preser	it, unless disturb	ed or problematic.	
Restrictive	Layer (if observed):								
	Type:		None			Hvdric	Soil Present?		Yes No
	Depth (inches):					, ,			
Pomarke:	Deptir (inches).								
Remarks: A positive in	ndication of hydric	soil wa	s observed. Refus	al du	e to coar	se fragm	nents.		
/ Positive ii	naication of rigarie	3011 110	observed. Rerus	ai aa	c to cour	oc magn	iciics.		
L									

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery		Sampling Date: 2021	1-Aug-16
Applicant/Owner: SunEast			State: NY	State: NY Sampling Point: W-KCF-02		
Investigator(s): Kevin Fergusor	າ , Brian Corrigan		Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.)): Hillslope		Local relief (concave, conv	/ex, none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA):	.RR R		Lat: 42.890138	Long: -	74.49636	Datum: WGS84
Soil Map Unit Name: NeC - Ne	llis loam, 8 to 15 p	ercent slopes			NWI classification:	: None
Are climatic/hydrologic condition	s on the site typic	al for this time of yea	ar? Yes <u>✓</u> No	(If no,	explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology ₋	significantly dis	turbed? Are "Norm	al Circumsta	nces" present? Y	es No
Are Vegetation, Soil,	or Hydrology ₋	naturally proble	ematic? (If needed,	explain any	answers in Remarks.)	
					_	
SUMMARY OF FINDINGS – F	ttach site map	showing samplin	ng point locations, trai	nsects, imp	ortant features, e	tc.
Hydrophytic Vegetation Present	? Yes	_ ∠ _ No				
Hydric Soil Present?	Yes	No / _	Is the Sampled Area with	nin a Wetland	d? Yes	No <u>_</u>
Wetland Hydrology Present?	Yes .	No /	If yes, optional Wetland	Site ID:		
Remarks: (Explain alternative pr Covertype is UPL.	ocedures here or i	n a separate report)				
HYDROLOGY Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required; c	heck all that apply)		Secondary	Indicators (minimum o	of two required)
Surface Water (A1)		_ Water-Stained Lea	ves (R9)	Surface	Soil Cracks (B6)	
High Water Table (A2)		_ Aquatic Fauna (B1:		_	ge Patterns (B10)	
Saturation (A3)		_ Marl Deposits (B15			rim Lines (B16)	
Water Marks (B1)		_ Hydrogen Sulfide (-	son Water Table (C2)	
Sediment Deposits (B2)	_	_ Oxidized Rhizosph	eres on Living Roots (C3)	-	n Burrows (C8)	22624 (CO)
Drift Deposits (B3)	_	_ Presence of Reduc	ced Iron (C4)		ion Visible on Aerial Im I or Stressed Plants (D´	•
Algal Mat or Crust (B4)	_	_ Recent Iron Reduc	tion in Tilled Soils (C6)		rphic Position (D2)	1)
Iron Deposits (B5)	_	_ Thin Muck Surface			Aquitard (D3)	
Inundation Visible on Aerial l	magery (B7) _	_ Other (Explain in R	Remarks)		ppographic Relief (D4)	
Sparsely Vegetated Concave	Surface (B8)				utral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No _		inches):	_		
Water Table Present?	Yes No _	✓ Depth (inches):	Wetland Hy	ydrology Present?	Yes No
Saturation Present?	Yes No _	✓ Depth (inches):			
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge, monitorir	g well, aerial photos	, previous inspections), if	available:		
Remarks:						
No positive indication of wetland	d hydrology was o	bserved.				

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:			
		Species?	Status	Number of Dominant Species The	at 5	(A)	
1. Carpinus caroliniana	20	Yes	FAC	Are OBL, FACW, or FAC:			
2. <i>Quercus rubra</i>	10	Yes	FACU	Total Number of Dominant Speci-	es 8	(B)	
3. Prunus serotina	5	No	FACU	Percent of Dominant Species Tha	+		
4				- Are OBL, FACW, or FAC:	62.5	(A/B)	
5				Prevalence Index worksheet:			
6				Total % Cover of:	Multiply B	v·	
7				- OBL species 0	x 1 =	y. 0	
	35	= Total Cov	er	FACW species 5	x 2 =	10	
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species 35	_ x3=	105	
1. Fraxinus americana	10	Yes	FACU	FACU species 30	_ x 4 =	120	
2. Carpinus caroliniana	5	Yes	FAC	UPL species 0	_ ^ x5=	0	
3				Column Totals 70		235 (B)	
4.				Prevalence Index = B/A	_	233 (B)	
5.							
6.				Hydrophytic Vegetation Indicator			
7.				1- Rapid Test for Hydrophyt	c Vegetation		
	15	= Total Cov	er	2 - Dominance Test is >50%			
Herb Stratum (Plot size:5 ft)		-		3 - Prevalence Index is ≤ 3.0			
1. Fraxinus americana	5	Yes	FACU	4 - Morphological Adaptatio		upporting	
2. Urtica dioica	5	Yes	FAC	data in Remarks or on a separate	-	I=:=\	
3. Impatiens capensis		Yes	FACW	Problematic Hydrophytic Ve			
4.				- Indicators of hydric soil and wetl	, 0,	/ must be	
5.				present, unless disturbed or prob	леттанс		
6.				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm	or more in di	amatar at	
7.				breast height (DBH), regardless o		ameter at	
8.				Sapling/shrub – Woody plants les	-	RH and	
9.				greater than or equal to 3.28 ft (1		orr arra	
10.				Herb – All herbaceous (non-wood		rdless of	
11.				size, and woody plants less than			
				Woody vines – All woody vines gr	eater than 3.2	8 ft in	
12		= Total Cov		height.			
Manda Vina Chusham (Dlah sina) 20 ft	15	_ 10tal Cov	er	Hydrophytic Vegetation Present	Yes 🗸 No)	
Woody Vine Stratum (Plot size:30 ft)	-	Voc	FAC	y ip ye igan i			
1. Vitis riparia	5	Yes	FAC	-			
2				-			
3.				-			
4				-			
	5	= Total Cov	er				

	cription: (Describe	to the de	-			ndicato	r or confirm the a	absence of indicators	s.)
Depth _	Matrix		Redox	Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	ture	Remarks
0 - 10	10YR 5/3	100					Silty Cla	ay Loam	
10 - 20	10YR 6/3	100					Silty Cla	ay Loam	
				_					
				_					_
				_			-		
				_					
				_			-		
				_					
				_					
				_					
				_			-		
				_			-		
		<u> </u>			- 146		<u> </u>		
	concentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. 2	_ocation: PL = Pore L	•
Hydric Soil								Indicators for Pro	blematic Hydric Soils³:
Histosol	` '		Polyvalue Bel					2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Sur	face	(S9) (LRR	R, MLR	A 149B)	Coast Prairie I	Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Mucky			(LRR K, I	L)		eat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleyed					Dark Surface	
	d Layers (A5)		Depleted Mat						ow Surface (S8) (LRR K, L)
	d Below Dark Surfa							•	face (S9) (LRR K, L)
	ark Surface (A12)		Depleted Dar						ese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			_	odplain Soils (F19) (MLRA 149B)
Sandy G	ileyed Matrix (S4)								(TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)							Red Parent M	
Stripped	d Matrix (S6)								Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	/ILRA 149	9B)					•	
	. /		•					Other (Explair	i in Remarks)
-			and wetland hydr	olog	y must be	e preser	nt, unless disturbe	ed or problematic.	
Restrictive I	_ayer (if observed):								
	Type:		None			Hydric	Soil Present?	`	Yes No⁄_
	Depth (inches):								
Remarks:									

Photo of Sample Plot North

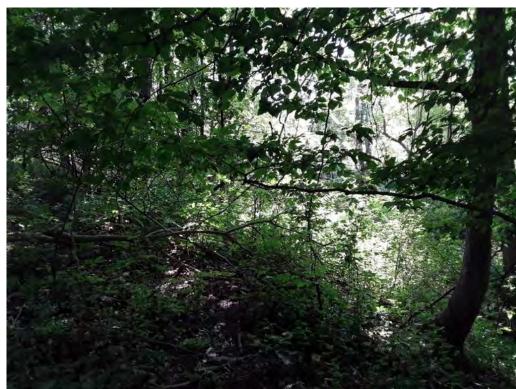


Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject City/County	: Sprakers, Montgomery	Sampling Date:	2021-Aug-17
Applicant/Owner: SunEast		State: NY	Sampling Point: V	V-KCF-03_PEM-1
Investigator(s): Kevin Ferguson	າ , Brian Corrigan	Section, Township	Range: NA	
Landform (hillslope, terrace, etc.	: Flood Plain	Local relief (concave, conv	/ex, none): Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA):	.RR R	Lat: 42.88903911	Long: -74.49672275	Datum: WGS84
Soil Map Unit Name: LaC- Lan	sing silt loam, 8 to 15 percent slo	opes	NWI classific	ation: None
Are climatic/hydrologic condition		-	(If no, explain in Remar	ks.)
Are Vegetation, Soil,	or Hydrology significar	ntly disturbed? Are "Norm	al Circumstances" present?	Yes No
Are Vegetation, Soil,	or Hydrology naturally	problematic? (If needed,	explain any answers in Rema	ırks.)
SUMMARY OF FINDINGS – A	Attach site map showing sa	mpling point locations, tra	nsects, important feature	es, etc.
Hydrophytic Vegetation Present			•	
		la Aba Camanlad Anaa wikh	:	Von (No
Hydric Soil Present?	Yes No	Is the Sampled Area with		Yes No
Wetland Hydrology Present?	Yes No	If yes, optional Wetland S	ite ID:	W-KCF-03
Wetland Hydrology Indicators: Primary Indicators (minimum of 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-Stain Aquatic Fau Marl Deposi Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S	ed Leaves (B9) na (B13) its (B15) ulfide Odor (C1) izospheres on Living Roots (C3) Reduced Iron (C4) Reduction in Tilled Soils (C6)	Secondary Indicators (minim Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aer Stunted or Stressed Plan Geomorphic Position (D2 Shallow Aquitard (D3) Microtopographic Relief FAC-Neutral Test (D5)	(C2) ial Imagery (C9) ts (D1) 2)
Field Observations:				
Surface Water Present?	Yes No [Depth (inches):	_	
Water Table Present?	Yes No [Depth (inches): 4	Wetland Hydrology Present?	Yes No
Saturation Present?	Yes No [Depth (inches): 0		
(includes capillary fringe)		· · · · · · · · · · · · · · · · · · ·	-	
	ո gauge, monitoring well, aerial բ	photos previous inspections) if	available.	 ,
Remarks: The criterion for wetland hydrol				

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksh Number of Dominant S			
ı.	70 COVE	species:	Status	Are OBL, FACW, or FAC:	pecies iliai	4	(A)
				Total Number of Domin Across All Strata:	ant Species	6	(B)
·				Percent of Dominant Sp	ecies That		
				Are OBL, FACW, or FAC:		66.7	(A/B)
i.				Prevalence Index works	heet:		
·				Total % Cover o		Multiply B	-
-		= Total Cov	er	- OBL species	0	x 1 =	0
apling/Shrub Stratum (Plot size:15 ft)		-		FACW species	20	x 2 =	40
. Lonicera morrowii	15	Yes	FACU	FAC species	35	x 3 =	105
. Rosa multiflora	10	Yes	FACU	FACU species	25	x 4 =	100
. Rhamnus cathartica	5	No	FAC	- UPL species	0	x 5 =	0
				- Column Totals	80		245 (B)
				Prevalence In		3.1	
				Hydrophytic Vegetation			
				1- Rapid Test for H		egetation	
	30	= Total Cov	er	2 - Dominance Tes			
lerb Stratum (Plot size: <u>5 ft</u>)		_		3 - Prevalence Inde		(Durandala a	
. Euthamia graminifolia	20	Yes	FAC	4 - Morphological a data in Remarks or on a			upporting
. Onoclea sensibilis	10	Yes	FACW	- Problematic Hydro			ılain)
. Impatiens capensis	10	Yes	FACW	- Indicators of hydric soi	. , .		-
. Urtica dioica	10	Yes	FAC	present, unless disturbe		,	y mast be
				Definitions of Vegetation			
				Tree – Woody plants 3 in		more in di	ameter a
				breast height (DBH), reg			
3.				Sapling/shrub - Woody	plants less tl	han 3 in. Di	3H and
·				greater than or equal to			
0.				Herb – All herbaceous (ı			ardless of
1.				size, and woody plants l			
2.				Woody vines – All wood	y vines great	er than 3.2	8 ft in
	50	= Total Cov	er	height.			
Voody Vine Stratum (Plot size: <u>30 ft</u>)		_		Hydrophytic Vegetation	Present?	es 🔽 No	
				_			
				_			
				_			
	0	= Total Cov	er				

Profile Description: (Describe	to the d	lepth needed to d	ocun	nent the	indicato	or confirm the a	bsence of indicate	ors.)		
Depth Matrix		Redox	Feat	ures						
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Text	ture	Remarks		
0 - 6 10YR 4/1	97	10YR 5/6	3	С	М	Silty Cla	ıy Loam			
			_							
							-			
			_			-				
			_							
			_							
						-				
			-							
			_							
			· —							
			. —							
¹Type: C = Concentration, D =	Depleti	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² l		e Lining, M = Matrix.		
Hydric Soil Indicators:							Indicators for P	roblematic Hydric Soils ³ :		
Histosol (A1)		Polyvalue Be	low S	Surface (S	8) (LRR	R, MLRA 149B)	2 cm Muck ((A10) (LRR K, L, MLRA 149B)		
Histic Epipedon (A2)		Thin Dark Su					Coast Prairi	e Redox (A16) (LRR K, L, R)		
Black Histic (A3)		Loamy Muck	-		(LRR K, I	-)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)		
Hydrogen Sulfide (A4)		Loamy Gleye					Dark Surfac	e (S7) (LRR K, L)		
Stratified Layers (A5)	F (A11	Depleted Ma		•			Polyvalue B	elow Surface (S8) (LRR K, L)		
Depleted Below Dark Surf Thick Dark Surface (A12)	ace (A)	Depleted Da			`		Thin Dark S	urface (S9) (LRR K, L)		
Sandy Mucky Mineral (S1)		Redox Depre			,		Iron-Manga	nese Masses (F12) (LRR K, L, R)		
Sandy Macky Mineral (31)		Redox Depre	:33101	13 (10)			Piedmont F	loodplain Soils (F19) (MLRA 149B)		
Sandy Redox (S5)							Mesic Spod	ic (TA6) (MLRA 144A, 145, 149B)		
							Red Parent	Material (F21)		
Stripped Matrix (S6)	MIDA 14	IOD					Very Shallow Dark Surface (TF12)			
Dark Surface (S7) (LRR R, I	MLKA 14	198)					Other (Expl	ain in Remarks)		
³ Indicators of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	t, unless disturbe	ed or problematic			
Restrictive Layer (if observed)):									
Type:		None			Hydric	Soil Present?		Yes/_ No		
Depth (inches):	-		•							
Remarks:					· ·					
A positive indication of hydric	soil wa	s observed. Refus	al du	e to coar	se fragn	nents.				
, repositive maneation or riganic		5 5550. 1041.110.45		c 10 cou.	5cag					

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Project/Site: Flat Creek Solar Project/Site: Project/Site: Flat Creek Solar Project/Site: Fla	oject	City/County: Spra	kers, Montgomery		21-Aug-17	
Applicant/Owner: SunEast			State: NY	S	Sampling Point: W-KC	F-03_UPL-1
Investigator(s): Kevin Ferguson	າ , Brian Corrigan		Section, Township,	Range: NA	ı	
Landform (hillslope, terrace, etc.): Hillslope		Local relief (concave, conv	/ex, none):_	Concave	Slope (%): 15 to 20
Subregion (LRR or MLRA):	.RR R		Lat: 42.88902829	Long:	-74.49681216	Datum: WGS84
Soil Map Unit Name: LaC - Lar	ısing silt loam, 8 to	15 percent slopes			NWI classification	n: None
Are climatic/hydrologic conditior	is on the site typica	al for this time of yea	ar? Yes <u>✓</u> No	(If no,	explain in Remarks.)	
Are Vegetation, Soil,		significantly dis		al Circumsta	ances" present?	Yes 🟒 No
Are Vegetation, Soil,	or Hydrology _	naturally proble	ematic? (If needed,	explain any	answers in Remarks.)
SUMMARY OF FINDINGS – A	Attach site map	showing samplin	ng point locations, tra	nsects, im	portant features, e	etc.
Hydrophytic Vegetation Present	? Yes	_ ✓ _ No				
Hydric Soil Present?	Yes .	No / _	Is the Sampled Area with	nin a Wetlan	d? Yes	sNo_ <u>-</u> /_
Wetland Hydrology Present?	Yes _	No / _	If yes, optional Wetland	Site ID:		
Remarks: (Explain alternative pr Covertype is UPL. Area is upland						
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	· - - -	_ Water-Stained Lea _ Aquatic Fauna (B1: _ Marl Deposits (B1: _ Hydrogen Sulfide (_ Oxidized Rhizosph _ Presence of Reduc _ Recent Iron Reduc	3) 5) Odor (C1) eres on Living Roots (C3) ted Iron (C4) tion in Tilled Soils (C6)	Surface Surface Drainag Moss Ti Dry-Sea Crayfisl Saturat Stunted	Undicators (minimum e Soil Cracks (B6) ge Patterns (B10) rim Lines (B16) ason Water Table (C2) h Burrows (C8) tion Visible on Aerial Ir d or Stressed Plants (D	magery (C9)
Iron Deposits (B5)		_ Thin Muck Surface		Shallow	v Aquitard (D3)	
Inundation Visible on Aerial Sparsely Vegetated Concave		_ Other (Explain in R	ernarks)	Microto	opographic Relief (D4) eutral Test (D5)	
Field Observations:		_				
Surface Water Present?	Yes No _	•	inches):	-		
Water Table Present?	Yes No _	<u>✓</u> Depth (inches):	Wetland H	ydrology Present?	Yes No
Saturation Present?	Yes No _	✓ Depth (inches):			
(includes capillary fringe)				_		
Remarks: The criterion for wetland hydrol		g well, aerial photos	, previous inspections), if	available:		

				T		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	: 4	(4)
1. Fraxinus americana	25	Yes	FACU	Are OBL, FACW, or FAC:		(A)
2. Malus sp.	10	Yes	NI	Total Number of Dominant Species	5 7	(B)
3. Rhus glabra	5	No	UPL	Across All Strata:		
4.				Percent of Dominant Species That	57.1	(A/B)
5.				Are OBL, FACW, or FAC:		
6.				Prevalence Index worksheet:		
7.				Total % Cover of:	<u>Multiply</u>	-
· ·	40	= Total Cov	er	OBL species 0	_ x1= _	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species 0	x 2 = _	0
1. Rhamnus cathartica	25	Yes	FAC	FAC species 45	x 3 =	135
2. Ulmus rubra	10	Yes	FAC	FACU species 30	x 4 =	120
3.		163	TAC	UPL species 5	x 5 =	25
4.				Column Totals 80	(A)	280 (B)
				Prevalence Index = B/A =	3.5	
5.		·		Hydrophytic Vegetation Indicators:		
6				1- Rapid Test for Hydrophytic	Vegetation	ı
7				✓ 2 - Dominance Test is >50%	_	
	35	= Total Cov	er	3 - Prevalence Index is $\leq 3.0^{1}$		
Herb Stratum (Plot size:5 ft)	_			4 - Morphological Adaptation	s¹ (Provide	supporting
1. Rhamnus cathartica	5	Yes	FAC	data in Remarks or on a separate s	heet)	•
2. Euthamia graminifolia	5	Yes	FAC	Problematic Hydrophytic Veg	etation¹ (Ex	(plain)
3. Parthenocissus quinquefolia	5	Yes	FACU	¹ Indicators of hydric soil and wetla	nd hydrolo	gy must be
4				present, unless disturbed or proble	ematic	
5				Definitions of Vegetation Strata:		
6.				Tree – Woody plants 3 in. (7.6 cm)	or more in o	diameter at
7				breast height (DBH), regardless of	height.	
8				Sapling/shrub – Woody plants less		DBH and
9				greater than or equal to 3.28 ft (1 r		
10				Herb – All herbaceous (non-woody		gardless of
11				size, and woody plants less than 3.		
12				Woody vines – All woody vines gre	ater than 3.	.28 ft in
	15	= Total Cov	er	height.		
Woody Vine Stratum (Plot size: 30 ft)		_		Hydrophytic Vegetation Present?	Yes N	lo
1						
2.						
3.						
4.						
	0	= Total Cov	er			
Demonstrat (In alcode whether women are being as a comparate		-				
Remarks: (Include photo numbers here or on a separat		N/ of domin	ant engelos	indoved as ODL FACIAL or FACI		
A positive indication of hydrophytic vegetation was obs	ervea (>50)% of domin	ant species	indexed as OBL, FACW, or FAC).		

	cription: (Describe	to the d	•			indicato	or confirm the ab	osence of indicate	ors.)
Depth	Matrix		Redox						
(inches)	Color (moist)	%_	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks
0 - 12	10YR 5/3	100		_			Silt Loam		
12 - 20	10YR 4/2	100		_			Silt Loam		
				_					
				_					
				_					
				_					
				_					
				_					
				_					
				_					
1T C		D l - ti	DM Deduced		-i NAC	N 4 l l	Cond Contract 21 a		- Limite - NA - NA-Auto
	Concentration, D =	Depletio	on, RM = Reduced	Mati	1X, MS =	Masked	Sand Grains. ² Lo		e Lining, M = Matrix.
Hydric Soil								Indicators for P	roblematic Hydric Soils³:
Histoso	` '		Polyvalue Bel				•	2 cm Muck ((A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Thin Dark Sui					Coast Prairi	e Redox (A16) (LRR K, L, R)
Black Hi			Loamy Mucky			(LRR K, I	_)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye					Dark Surfac	e (S7) (LRR K, L)
	d Layers (A5) d Below Dark Surfa	252 (Depleted Mat					Polyvalue B	elow Surface (S8) (LRR K, L)
	d Below Dark Surfa ark Surface (A12)	ace (ATI	Depleted Dar		` '			Thin Dark S	urface (S9) (LRR K, L)
	Mucky Mineral (S1)		Redox Depre			,		Iron-Manga	nese Masses (F12) (LRR K, L, R)
			Redox Depile	55101	IS (FO)			Piedmont F	loodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)							Mesic Spod	ic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)							Red Parent	Material (F21)
	d Matrix (S6)							Very Shallov	w Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ИLRA 14	9B)					Other (Expl	ain in Remarks)
	of hydrophytic veg		and wetland hydr	olog	y must b	e preser	t, unless disturbe	d or problematic	
Restrictive I	Layer (if observed):	:							
	Type:		None			Hydric	Soil Present?	Yes	No / _
	Depth (inches):								
Remarks:						•			
	indication of hydr	ic soils v	vas observed.						
rio positivo	a.cacio oya.								
Í									

Photo of Sample Plot North

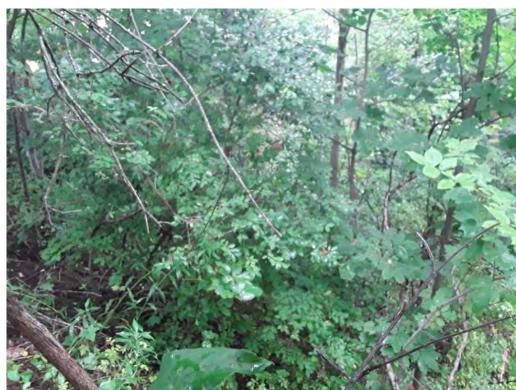


Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: New Bremen Solar	City/County:	Sprakers, Montgomery County	Sampling	Date: 2021-Aug-18
Applicant/Owner: AES		State: NY	Sampling Po	pint: W-KCF-04_PEM-1
Investigator(s): Kevin Fergusor	ı , Ben Corrigan	Section, Township,	Range: N/A	
Landform (hillslope, terrace, etc.)	: Depression	Local relief (concave, conv	ex, none): Concave	Slope (%): 5 to 10
Subregion (LRR or MLRA):		Lat: 42.891362146	5 Long: -74.495408	563 Datum: WGS84
Soil Map Unit Name:			NWI cl	assification:
Are climatic/hydrologic condition	s on the site typical for this time	of year? Yes _✓_ No	(If no, explain in	Remarks.)
Are Vegetation, Soil,	or Hydrology significan	itly disturbed? Are "Norma	al Circumstances" pres	ent? Yes 🟒 No
Are Vegetation, Soil,	or Hydrology naturally	problematic? (If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS – A	ttach site map showing sa	mpling point locations, trar	nsects, important fe	eatures, etc.
Hydrophytic Vegetation Present	? Yes <u></u> No			
Hydric Soil Present?	Yes _ ✓ _ No	Is the Sampled Area withi	n a Wetland?	Yes No
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Si		W-KCF-04
			ite ib.	W-ICI-04
Remarks: (Explain alternative pro	ocedures here or in a separate r	eport)		
Covertype is PEM.				
HADBOLOCA				
HYDROLOGY				
Wetland Hydrology Indicators:				
Primary Indicators (minimum of	one is required: check all that a	(vlaq	Secondary Indicators	(minimum of two required)
1 - Thirties y marcator 5 (Thirminian or	one is required, effect an effect a	56.31	Surface Soil Cracks	•
Surface Water (A1)	Water-Staine		✓ Drainage Patterns	
∕ High Water Table (A2)	Aquatic Faur		Moss Trim Lines (B	
✓ Saturation (A3)	Marl Deposi		Dry-Season Water	
Water Marks (B1)		ulfide Odor (C1)	Crayfish Burrows (
Sediment Deposits (B2)		izospheres on Living Roots (C3)		on Aerial Imagery (C9)
Drift Deposits (B3)		Reduced Iron (C4)	Stunted or Stresse	
Algal Mat or Crust (B4)		Reduction in Tilled Soils (C6)	Geomorphic Positi	
Iron Deposits (B5)	Thin Muck S		Shallow Aquitard (
Inundation Visible on Aerial I		in in Remarks)	✓ Microtopographic	•
Sparsely Vegetated Concave	Surface (B8)		✓ FAC-Neutral Test ([
Field Observations:			(,
Surface Water Present?	Yes No _ _ □	Depth (inches):		
Water Table Present?	Yes <u></u> ✓ No	Depth (inches): 8	Wetland Hydrology Pr	esent? Yes No
Saturation Present?	Yes _ ✓ _ No	Depth (inches): 0		
(includes capillary fringe)				
Describe Recorded Data (stream	gauge monitoring well serial r	photos previous inspections) if	availahle:	•
Describe Recorded Data (stream	r gauge, monitoring well, aeriai p	motos, previous inspections, in	available.	
Remarks:				

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)							
		Dominant I Species?	ndicator Status	Dominance Test works Number of Dominant	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	•	100	(A/B)
5.				Are OBL, FACW, or FAC			
6.				Prevalence Index work	sheet:		
· ·				Total % Cover	of:	Multiply I	<u>Зу:</u>
7				OBL species	0	x 1 =	0
	0	= Total Cover		FACW species	80	x 2 =	160
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	0	x 3 =	0
1				FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3				Column Totals	80	(A)	160 (B)
4					ndex = B/A =	2	100 (b)
5.				-			
6.				Hydrophytic Vegetatio			
7.				1- Rapid Test for		egetation/	
··· 	0	= Total Cover		_ ✓ 2 - Dominance Te			
Horb Stratum (Plot size: Eft.)		- rotal cover		3 - Prevalence Inc	dex is $\leq 3.0^1$		
Herb Stratum (Plot size:5 ft)	00	V	EA C\A/	4 - Morphologica	l Adaptations	(Provide s	supporting
1. Impatiens capensis	80	Yes	FACW	data in Remarks or on	a separate sh	ieet)	
2				Problematic Hyd	rophytic Vege	tation¹ (Ex	plain)
3				¹Indicators of hydric so	oil and wetlan	d hydrolog	y must be
4				present, unless disturb	oed or problei	matic	
5				Definitions of Vegetati	on Strata:		
6.				Tree – Woody plants 3		more in c	liameter at
7.				breast height (DBH), re			
8.				Sapling/shrub - Wood			BH and
9.				greater than or equal			
40		· · · · · · · · · · · · · · · · · · ·		Herb – All herbaceous			ardless of
11				size, and woody plants	-		
11				Woody vines - All woo			28 ft in
12				height.	, 0		
	80	= Total Cover	-		n Procent?	/oc / N	^
Woody Vine Stratum (Plot size: 30 ft)				Hydrophytic Vegetation	on Fresent!	ies iv	·
1							
2							
3.							
4.							
4.	0	= Total Cover	•				

Profile Desc	cription: (Describe t	to the	depth needed to d	docun	nent the	indicato	r or confirm the	absence of indicators	5.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Te	exture	Remarks
0 - 8	10YR 4/2	98	10YR 5/6	2	C	М	Silt	Loam	
8 - 20	10YR 5/1	90	7.5R 4/8	10		M	Sandy	Clay Loam	
		-					-		
							-		
							-		
¹Type: C = C	Concentration, D = I	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. 2	Location: PL = Pore L	ining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pro	blematic Hydric Soils³:
Histosol	(A1)		Polyvalue Be	elow S	Surface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A1	10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Su						Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Mucl	y Mir	neral (F1)	(LRR K,	L)		eat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (
Stratifie	d Layers (A5)		_ <u>✓</u> Depleted Ma	atrix (F3)				ow Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A1							face (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da)			se Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Redox Depr	essio	ns (F8)				odplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)								(TA6) (MLRA 144A, 145, 149B)
Sandy R	ledox (S5)							Red Parent Ma	
Stripped	d Matrix (S6)								Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 1	49B)					Other (Explain	
3Indicators	of hydrophytic you	otation	and watland by	rolog	v must b	o procor	at unlace dicturb	ed or problematic.	· · · · · ·
-			i and welland nyd	rolog	y must b	e preser	it, uriless disturb	bed of problematic.	
	Layer (if observed):		Mana			I Is salast a	Call Burners		Ver (No
	Type:		None			Hyaric	Soil Present?		Yes No
	Depth (inches):								
Remarks:									

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Applicant/Owner: SunEast Investigator(s): Kevin Ferguso Landform (hillslope, terrace, etc	roject	City/Count	y: Sprakers, Montgomery Coun	ty	Sampling Date: 20	21-Aug-18
Landform (hillslope, terrace, etc			State: No	ew York	Sampling Point: W-K	CF-04_UPL-1
•	on, Abi Light		Section, Township	p, Range: N	Α	
	:.): Hillslope		Local relief (concave, cor	nvex, none):	Concave	Slope (%): 10 to 20
Subregion (LRR or MLRA):	LRR L		Lat: 42.8912766	Long:	-74.4951495	Datum: WGS84
Soil Map Unit Name: Rock Օւ	utcrop-Farmingto	on association, l	RIF-very steep		NWI classification	on: None
Are climatic/hydrologic conditio	ns on the site tyr	oical for this tim	e of year? Yes _✓_ N	lo (If no	o, explain in Remarks.)
Are Vegetation, Soil,	, or Hydroloខ្	gy significa	intly disturbed? Are "Norr	mal Circumst	tances" present?	Yes No
Are Vegetation, Soil,	, or Hydroloខ្	gy naturall	y problematic? (If needed	d, explain an	y answers in Remarks	5.)
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative p	rocedures here	/es No _ ✓ /es No _ ✓ /es No _ ✓ or in a separate	Is the Sampled Area with If yes, optional Wetland report)	hin a Wetlan		etc. s No⁄_
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of the control of the cont		Water-Stair	ned Leaves (B9)	Surfac	y Indicators (minimun ee Soil Cracks (B6) age Patterns (B10)	n of two required)
High Water Table (A2)		Aquatic Fa			Trim Lines (B16)	
Saturation (A3) Water Marks (B1)		Marl Depos	Sits (B15) Sulfide Odor (C1)	Dry-Se	eason Water Table (C2)
Sediment Deposits (B2)			hizospheres on Living Roots (C3)	1	sh Burrows (C8)	
Drift Deposits (B3)			f Reduced Iron (C4)	Satura	ation Visible on Aerial	
Algal Mat or Crust (B4)			Reduction in Tilled Soils (C6)		ed or Stressed Plants (D1)
Iron Deposits (B5)			Surface (C7)		orphic Position (D2)	
Inundation Visible on Aerial	l Imagery (B7)	Other (Exp	lain in Remarks)		w Aquitard (D3)	N
Sparsely Vegetated Concave	e Surface (B8)				topographic Relief (D4 eutral Test (D5)	!)
Field Observations:	_				cuttur rest (D3)	
Surface Water Present?	Yes N	lo /	Depth (inches):			
	Yes N		· · · · · · · · · · · · · · · · · · ·	— Wotland I	Hydrology Present?	Yes No _ _ ∠
WATER LABOR Dresent?			Depth (inches):	— welland r	nyurology Present?	165 140 Z
Water Table Present?	Yes N	10	Depth (inches):	_		
Saturation Present?						
Saturation Present? (includes capillary fringe)	m gauge, monito	ring well, aerial	photos, previous inspections), i	f available:		 -

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	2	(4)
1. Acer rubrum	20	Yes	FAC	Are OBL, FACW, or FAC:		(A)
2. Quercus alba	15	Yes	FACU	Total Number of Dominant Species	9	(D)
3. Fagus grandifolia	10	Yes	FACU	Across All Strata:		(B)
4. Betula alleghaniensis	5	No	FAC	Percent of Dominant Species That	22.2	(A/B)
		INO	TAC	Are OBL, FACW, or FAC:		(A/ b)
5				Prevalence Index worksheet:		
6				Total % Cover of:	Multiply I	<u>Ву:</u>
7				OBL species 0	x 1 =	0
	50	= Total Cov	er	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species 30	x 3 =	90
1. Acer saccharum	10	Yes	FACU	FACU species 55	x 4 =	220
2. Hamamelis virginiana	5	Yes	FACU	UPL species 0	x 5 =	0
3				Column Totals 85	(A)	310 (B)
4				Prevalence Index = B/A =	3.6	310 (B)
5.						
6.				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic \	egetation/	
	15	= Total Cov	er	2 - Dominance Test is > 50%		
Herb Stratum (Plot size:5 ft)		•		3 - Prevalence Index is ≤ 3.0 ¹		
1. Fraxinus americana	10	Yes	FACU	4 - Morphological Adaptations		supporting
2. Rubus idaeus	5	Yes	FACU	data in Remarks or on a separate sh		
3. Urtica dioica	5	Yes	FAC	Problematic Hydrophytic Vege	-	
	5			¹Indicators of hydric soil and wetlan		gy must be
		Yes	NI	present, unless disturbed or proble	matic	
5				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) o		diameter at
7				breast height (DBH), regardless of h	_	
8				Sapling/shrub – Woody plants less t		BH and
9				greater than or equal to 3.28 ft (1 m		
10				Herb – All herbaceous (non-woody)		gardless of
11				size, and woody plants less than 3.2		
12				Woody vines – All woody vines grea	ter than 3.	28 ft in
	25	= Total Cov	er	height.		
Woody Vine Stratum (Plot size:30 ft)		-		Hydrophytic Vegetation Present?	Yes N	0 🟒
1.						
2.						
3.						
4.				•		
	0	= Total Cov	or	•		
		- Total Cov	-			I
Remarks: (Include photo numbers here or on a separat	e sheet.)					
No positive indication of hydrophytic vegetation was ob	served (≥	50% of don	ninant specie	es indexed as FAC– or drier).		

	scription: (Describe	to the d	•			indicato	or confirm the a	bsence of indicator	rs.)
Depth	Matrix		Redox						
(inches)	Color (moist)	%_	Color (moist)	%	Type ¹	Loc ²	Tex	ture	Remarks
0 - 2	10YR 3/3	100		_			Lo	am	
2 - 14	10YR 6/3	100		_			Silty Cla	ay Loam	
				_					
	_			_			-		
				_					
				_					
				_					
				_					
				_					
		- —		_					
				_					
¹Type: C =	Concentration, D =	Depletion	on, RM = Reduced	Matı	ix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pro	oblematic Hydric Soils³:
Histoso	ol (A1)		Polyvalue Beld	ow S	urface (S	8) (LRR	R, MLRA 149B)		(10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark Sur						
	listic (A3)		Loamy Mucky						Redox (A16) (LRR K, L, R)
	gen Sulfide (A4)		Loamy Gleyed				•		Peat or Peat (S3) (LRR K, L, R)
	ed Layers (A5)		Depleted Mat					Dark Surface	
Deplete	ed Below Dark Surfa	ace (A11						•	low Surface (S8) (LRR K, L)
Thick D	ark Surface (A12)		Depleted Darl	k Sui	face (F7))			rface (S9) (LRR K, L)
Sandy	Mucky Mineral (S1)		Redox Depres	sior	ıs (F8)			_	ese Masses (F12) (LRR K, L, R)
Sandy	Gleyed Matrix (S4)		·						oodplain Soils (F19) (MLRA 149B)
-	Redox (S5)							•	(TA6) (MLRA 144A, 145, 149B)
-	ed Matrix (S6)							Red Parent M	
	urface (S7) (LRR R, N	ΛΙ DΔ 1./	QR)					•	Dark Surface (TF12)
Daik 3	urrace (37) (EKK K, K	ILIXA 14	3 6)					Other (Explai	n in Remarks)
3Indicators	of hydrophytic veg	etation	and wetland hydro	ology	/ must b	e preser	t, unless disturbe	ed or problematic.	
Restrictive	Layer (if observed):								
	Type:		None			Hydric	Soil Present?		Yes No/_
	Depth (inches):		_						
Remarks:									
No positive	e indication of hydri	ic soils v	vas observed. The	crite	rion for	hydric s	oil is not met. Ref	usal due to coarse	fragments.

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	/	Sampling Date: 202	1-Aug-18
Applicant/Owner: SunEast			State: Nev	w York S	Sampling Point: W-KC	F-05_PEM-1
Investigator(s): Kevin Ferguson	n, Abi Light		Section, Township,	Range: NA		
Landform (hillslope, terrace, etc.)): Depression		Local relief (concave, conv	/ex, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA):L	RR L	_	Lat: 42.8857064	Long:	-74.4972165	Datum: WGS84
Soil Map Unit Name: Lansing	silt loam, LaD-15-25	5% slopes			NWI classification	: None
Are climatic/hydrologic condition	ns on the site typica	l for this time of year	ar? Yes <u>✓</u> No	(If no,	explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology _	significantly dis	sturbed? Are "Norma	al Circumsta	ances" present?	⁄es _ _∕ _ No
Are Vegetation, Soil,	or Hydrology _	naturally probl	ematic? (If needed,	explain any	answers in Remarks.)
SUMMARY OF FINDINGS – A	Attach site map	showing samplir	ng point locations, trar	nsects, im	portant features, e	etc.
Hydrophytic Vegetation Present	:? Yes _	✓_ No				
Hydric Soil Present?	Yes _	✓_ No	Is the Sampled Area withi	in a Wetland	l? Yes _	✓_ No
Wetland Hydrology Present?	Yes	∠ No	If yes, optional Wetland S	ite ID:	W-K0	CF-05
Remarks: (Explain alternative pr	· · · · · · · · · · · · · · · · · · ·					
Covertype is PEM. Area is wetlar	nd, all three wetland	d parameters are p	resent.			
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	f one is required: ch	neck all that anniv)		Secondary	Indicators (minimum	of two required)
I Timary marcators (minimum or	one is required, cr	ісскап спасарріуд		-	Soil Cracks (B6)	or two required)
Surface Water (A1)		_ Water-Stained Lea	ves (B9)		ge Patterns (B10)	
High Water Table (A2)		_ Aquatic Fauna (B1		-	rim Lines (B16)	
∕ Saturation (A3)		_ Marl Deposits (B1	5)		ason Water Table (C2)	
Water Marks (B1)		_ Hydrogen Sulfide			n Burrows (C8)	
Sediment Deposits (B2)			eres on Living Roots (C3)	-	ion Visible on Aerial In	nagery (C9)
Drift Deposits (B3)		Presence of Reduc			d or Stressed Plants (D	
Algal Mat or Crust (B4)	_		tion in Tilled Soils (C6)		rphic Position (D2)	• ,
Iron Deposits (B5)		_ Thin Muck Surface			Aguitard (D3)	
Inundation Visible on Aerial	-	Other (Explain in F	Remarks)		pographic Relief (D4)	
Sparsely Vegetated Concave	Surface (B8)				utral Test (D5)	
Field Observations:						
Surface Water Present?	Yes No _ _	∠ Depth	(inches):			
Water Table Present?	Yes No	∠ Depth	(inches):	Wetland H	ydrology Present?	Yes No
Saturation Present?	Yes 🟒 No _		(inches): 0			
(includes capillary fringe)						
Describe Recorded Data (stream	n gauge monitoring	well aerial nhotos	nrevious inspections) if:	available.		
Describe Recorded Data (stream	ii gauge, monitoring	s well, acrial priotos	s, previous irispections, ire	available.		
Remarks:						
The criterion for wetland hydrol	logy is met. A positi	ve indication of wet	land hydrology was obser	ved (primar	y and secondary indic	ators were present).
,	0,7		, 6,	ч .	,	' '

Tree Stratum (Plot size:30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet	t:		
<u>iree stratum</u> (Flot size. <u>so it</u>)	% Cover	Species?	Status	Number of Dominant Spec	ies That	2	(A)
1. <i>Fraxinus pennsylvanica</i>	10	Yes	FACW	Are OBL, FACW, or FAC:			
2				Total Number of Dominant	Species	2	(B)
3				Across All Strata:	Th		
4				Percent of Dominant Speci Are OBL, FACW, or FAC:	es mai	100	(A/B)
5				Prevalence Index workshee	et:		
6				Total % Cover of:		Multiply	Bv:
7				OBL species	0	x 1 =	0
	10	= Total Cov	er	FACW species	90	x 2 =	180
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species	15	x 3 =	45
1				FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3				Column Totals	105	(A)	225 (B)
4				Prevalence Index	c = B/A =	2.1	
5				Hydrophytic Vegetation Inc	licators:		
6				1- Rapid Test for Hydr		egetation	
7				2 - Dominance Test is		свешноп	
	0	= Total Cov	er	✓ 3 - Prevalence Index is			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Ada		(Provide	supporting
1. <i>Impatiens capensis</i>	80	Yes	FACW	data in Remarks or on a se			24Pp9
2. Euthamia graminifolia	10	No	FAC	Problematic Hydroph	•		plain)
3. <i>Urtica dioica</i>	5	No	FAC	¹Indicators of hydric soil an			•
4				present, unless disturbed of		-	
5				Definitions of Vegetation S	trata:		
6				Tree – Woody plants 3 in. (7	7.6 cm) or	more in o	diameter at
7				breast height (DBH), regard	dless of he	eight.	
8				Sapling/shrub – Woody pla			BH and
9				greater than or equal to 3.2			
10				Herb – All herbaceous (nor	, ,		gardless of
11.				size, and woody plants less			
12.				Woody vines – All woody vi	nes great	er than 3.	28 ft in
	95	= Total Cov	er	height.			
Woody Vine Stratum (Plot size:30 ft)	-	-		Hydrophytic Vegetation Pr	resent? Y	es 🟒 N	0
1.							
2.							
3.							
4.							
-		= Total Cov	or	·			

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).

		o the d	•			indicato	or confirm the a	bsence of indicators	5.)
Depth	Matrix Color (moist)		Redox			1002	Tox	duro.	Domarks
(inches) 0 - 10	Color (moist)	<u>%</u> 98	Color (moist) 10YR 5/8		Type ¹	Loc ²		cture	Remarks
0-10	10YR 5/1	90	1011 3/6	2			Graveny	Silty Clay	
		· — ·							
				- —					
		· <u></u> - ·				· <u></u>			
¹Type: C = Con	centration. D = Γ	enletic	on. RM = Reduced	Mati	rix. MS =	Masked	Sand Grains. 2	ocation: PL = Pore L	ining M = Matrix
Hydric Soil Ind		- ср.сс.	,		,	masnea	24.14 3.41.15, 2		blematic Hydric Soils³:
Histosol (A			Polyvalue Re	low S	urface (9	58) (I RR I	R, MLRA 149B)		·
Histic Epipe	•		Thin Dark Su						10) (LRR K, L, MLRA 149B)
Black Histic			Loamy Muck						Redox (A16) (LRR K, L, R)
	Sulfide (A4)		Loamy Gleye	-		(=,	-,	-	eat or Peat (S3) (LRR K, L, R)
Stratified L			✓ Depleted Ma					Dark Surface (
		ce (A11) Redox Dark		-				ow Surface (S8) (LRR K, L)
Thick Dark	Surface (A12)		Depleted Da	rk Sui	rface (F7)		Thin Dark Surf	
Sandy Muc	ky Mineral (S1)		Redox Depre	ession	ıs (F8)				se Masses (F12) (LRR K, L, R)
Sandy Gley	ed Matrix (S4)								odplain Soils (F19) (MLRA 149B)
Sandy Red	ox (S5)								(TA6) (MLRA 144A, 145, 149B)
Stripped M								Red Parent Ma	
	ce (S7) (LRR R, M	LRA 14	9B)						Dark Surface (TF12)
	(-·) (····) ···		,					Other (Explain	i in Remarks)
3Indicators of	nydrophytic vege	etation	and wetland hyd	rolog	y must b	e presen	t, unless disturbe	ed or problematic.	
Restrictive Lay	er (if observed):								
Ту	pe:		None	_		Hydric	Soil Present?		Yes No
De	pth (inches):								
Remarks:									
A positive indi	cation of hydric s	soil was	s observed. The c	riterio	on for hy	dric soil	is met. Refusal du	ue to coarse fragmer	nts.

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/Cou	unty: Spraker	s, Montgomery County	/	Sampling Date: 20	21-Aug-18
Applicant/Owner: SunEast				State: Ne	w York	Sampling Point: W-K	CF-05_UPL-1
Investigator(s): Kevin Fergusor	າ, Brian Corrigar	n		Section, Township,	Range: N.	Α	
Landform (hillslope, terrace, etc.)	: Hillslope		Loc	al relief (concave, conv	/ex, none):	Concave	Slope (%): 10 to 20
Subregion (LRR or MLRA):L	RR L			Lat: 42.8855894	Long:	-74.4973109	Datum: WGS84
Soil Map Unit Name: Lansing s	silt loam, LaD-8-	15% slopes				NWI classification	n: None
Are climatic/hydrologic condition	s on the site typ	oical for this	time of year?	Yes <u></u> ✓ No)(If no	o, explain in Remarks.)	
Are Vegetation, Soil,	or Hydrolog	gy signi	ficantly distur	bed? Are "Norm	al Circums	tances" present?	Yes No
Are Vegetation, Soil,	or Hydrolog	gy natu	rally problema	atic? (If needed,	explain an	y answers in Remarks	i.)
SUMMARY OF FINDINGS – A	ttach site ma	ap showing	g sampling _l	point locations, tra	nsects, in	nportant features,	etc.
Hydrophytic Vegetation Present	? Y	es No _	/				
Hydric Soil Present?		es No _	i	he Sampled Area with	in a Wetlan	nd? Ve	s No⁄_
			ł	•		id. ic	3110
Wetland Hydrology Present?		es No _		es, optional Wetland S	ite ID:		
Remarks: (Explain alternative pro		•	•				
Covertype is UPL. Area is upland	l, not all three w	etland para	meters are pr	esent.			
HYDROLOCY							
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of	one is required	l; check all th	at apply)		Secondar	y Indicators (minimum	of two required)
	•			(5.0)		ce Soil Cracks (B6)	•
Surface Water (A1)			tained Leaves	(B9)		age Patterns (B10)	
High Water Table (A2)			Fauna (B13)		Moss	Trim Lines (B16)	
Saturation (A3)			posits (B15)	or (C1)	Dry-Se	eason Water Table (C2)
Water Marks (B1)			en Sulfide Odo		Crayfis	sh Burrows (C8)	
Sediment Deposits (B2)			e of Reduced	es on Living Roots (C3)	Satura	ation Visible on Aerial	lmagery (C9)
Drift Deposits (B3)				n in Tilled Soils (C6)	Stunte	ed or Stressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5)			ron Reduction ick Surface (C.		Geom	orphic Position (D2)	
Iron Deposits (B5) Inundation Visible on Aerial I	magany (R7)		Explain in Rem		Shallo	w Aquitard (D3)	
Sparsely Vegetated Concave		Other (E	xpiaiii iii keii	idi KS)	Microt	topographic Relief (D4)
Sparsely vegetated Concave	Surface (Bo)				FAC-N	eutral Test (D5)	
Field Observations:							
Surface Water Present?	Yes N	0	Depth (inc	hes):	_		
Water Table Present?	Yes N	0	Depth (inc	hes):	Wetland I	Hydrology Present?	Yes No
Saturation Present?	Yes N	0	Depth (inc	hes):			
(includes capillary fringe)					-		
Describe Recorded Data (stream	gauge, monito	ring well, ae	rial photos, pr	revious inspections), if	available:		
	. 88-,		р, р.				
Remarks:							
The criterion for wetland hydrol	ogy is not met. I	No positive i	ndication of w	etland hydrology was	observed.		

				T		1
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	1	(4)
1. Ostrya virginiana	15	Yes	FACU	Are OBL, FACW, or FAC:		(A)
2. Acer saccharum	5	Yes	FACU	Total Number of Dominant Species	6	(B)
3. Carya glabra	5	Yes	FACU	Across All Strata:		(B)
4.			.,,,,,	Percent of Dominant Species That	16.7	(A/B)
5.				Are OBL, FACW, or FAC:		(, (, D)
6.				Prevalence Index worksheet:		
7.				Total % Cover of:	<u>Multiply I</u>	By:
,	25	= Total Cov		OBL species 0	x 1 =	0
Conline/Charle Charters (Diet siese 15 ft)		_ 10tal C0v	ei	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)	45	V	FACIL	FAC species 40	x 3 =	120
1. Carya glabra	15	Yes	FACU	FACU species 65	x 4 =	260
2. Rubus idaeus	10	Yes	FACU	UPL species 0	x 5 =	0
3				Column Totals 105	(A)	380 (B)
4				Prevalence Index = B/A =	3.6	
5				Hydrophytic Vegetation Indicators:		
6.				1- Rapid Test for Hydrophytic \	Vogotation	
7					regetation	
	25	= Total Cov	er	2 - Dominance Test is > 50%		
Herb Stratum (Plot size: 5 ft)		_		3 - Prevalence Index is ≤ 3.0¹	1 (D	
1. Euthamia graminifolia	40	Yes	FAC	4 - Morphological Adaptations	-	supporting
2. Fraxinus americana	10	No	FACU	data in Remarks or on a separate sh		(i)
3. Rosa multiflora	5	No	FACU	Problematic Hydrophytic Vege		
4.				¹ Indicators of hydric soil and wetlan present, unless disturbed or proble		gy must be
5.				' ' 	matic	
6.				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) o		diameter at
7				breast height (DBH), regardless of h	_	NDLL and
8.				Sapling/shrub – Woody plants less t greater than or equal to 3.28 ft (1 m		ивн апо
9				.		rardlass of
10				Herb – All herbaceous (non-woody) size, and woody plants less than 3.2		gardiess of
11						20 ft in
12				Woody vines – All woody vines grea height.	ter triari 5	20 11 111
	55	= Total Cov	er			
Woody Vine Stratum (Plot size: 30 ft)				Hydrophytic Vegetation Present?	Yes N	0
1						
2.	·					
3.						
4.						
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a separat						
No positive indication of hydrophytic vegetation was ob	served (≥	50% of don	ninant specie	es indexed as FAC– or drier).		

	•	to the de	•			ndicato	r or confirm the a	bsence of indicator	rs.)
Depth _	Matrix		Redox	Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture	Remarks
0 - 12	10YR 5/3	100					Silty Cla	y Loam	
				_					
				_				_	
				_					-
		· ·		_					
				_					
				_					
				_					
				_					
				_					
¹Tvpe: C = C	 Concentration, D = I	Depletio	n. RM = Reduced	— Mati	rix. MS =	Masked	Sand Grains. ² L	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil		- ср.сс.о	., Reduced		,		24.14 4.41.151		oblematic Hydric Soils ³ :
Histosol			Polyvalue Bel	۲ س	urfaca (S	2) (I DD I	D MI DA 1/OR)		•
	oipedon (A2)		Thin Dark Sur						(10) (LRR K, L, MLRA 149B)
Black Hi			Loamy Mucky						Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loanly Mucky			(LKK K, I	-)	•	Peat or Peat (S3) (LRR K, L, R)
,	d Layers (A5)		Depleted Mat					Dark Surface	
	d Below Dark Surfa							Polyvalue Bel	low Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted Dar						rface (S9) (LRR K, L)
	lucky Mineral (S1)		Redox Depre			,		Iron-Mangan	ese Masses (F12) (LRR K, L, R)
			Redox Depre	33101	13 (10)			Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
-	ileyed Matrix (S4)							Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
-	edox (S5)							Red Parent M	laterial (F21)
	d Matrix (S6)							Very Shallow	Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M	ILRA 149	9B)					Other (Explai	n in Remarks)
3Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must be	e preser	it, unless disturbe	ed or problematic.	
Restrictive I	_ayer (if observed):					İ		·	
	Type:		None			Hydric	Soil Present?		Yes No _ ∠ _
	Depth (inches):		None			i iyanc	John Tresent.		105 <u> </u>
-	Deptil (iliches).	_							
Remarks:	indication of hydri	c soils w	as observed. The	crite	erion for	hvdric s	nil is not met. Ref	usal due to coarse	fragments
ino positive	indication of riguri	C 30113 W	as observed. The	CITC	.11011101	riyuric s	on is not met. Ken	asai ade to coarse	riaginents.
L									

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot
West

Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	kers, Montgomery County	,	Sampling Date: 2021-Aug-19			
Applicant/Owner: SunEast		<u> </u>	State: NY		Sampling Point: W-KC	ampling Point: W-KCF-06_PEM-1		
Investigator(s): Kevin Ferguso	n, Brian Corrigan		Section, Township,	Range: NA	4			
Landform (hillslope, terrace, etc.): Depression	1	Local relief (concave, conv	/ex, none):	Concave	Slope (%): 1 to 3		
Subregion (LRR or MLRA):	_RR L		Lat: 42.887443942	21 Long:	-74.5011883043	Datum: WGS84		
Soil Map Unit Name: Lansing	silt loam, LaD-8-1	5% slopes			NWI classification	: None		
Are climatic/hydrologic condition	ns on the site typic	cal for this time of ye	ar? Yes <u></u> ✓ No	(If no	, explain in Remarks.)			
Are Vegetation, Soil,	or Hydrology	significantly dis	sturbed? Are "Norm	al Circumst	ances" present?	⁄es <u> </u>		
Are Vegetation, Soil,	or Hydrology	naturally probl	ematic? (If needed,	explain any	y answers in Remarks.))		
SUMMARY OF FINDINGS – A	Attach site map	showing sampli	ng point locations, trar	nsects, im	portant features, e	etc.		
Hydrophytic Vegetation Present			<u> </u>		<u>·</u>			
		No	 		-12	€ NI-		
Hydric Soil Present?		_ ✓ _ No	Is the Sampled Area withi			No		
Wetland Hydrology Present?	Yes	_ ✓ No	If yes, optional Wetland S	ite ID:	W-K0	CF-06		
Remarks: (Explain alternative pr	ocedures here or	in a separate report)					
Covertype is PEM. Area is wetla	nd, all three wetla	nd parameters are p	resent.					
HYDROLOGY								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of	f one is required;	check all that apply)		Secondary	Indicators (minimum	of two required)		
				-	e Soil Cracks (B6)			
Surface Water (A1)	-	Water-Stained Lea			ge Patterns (B10)			
High Water Table (A2)	-	Aquatic Fauna (B1		Moss T	rim Lines (B16)			
✓ Saturation (A3)	_	Marl Deposits (B1		Dry-Sea	ason Water Table (C2)			
Water Marks (B1)	-	Hydrogen Sulfide	neres on Living Roots (C3)	Crayfis	h Burrows (C8)			
Sediment Deposits (B2) Drift Deposits (B3)	-	Oxidized Rhizospi Presence of Redu	_	Saturat	tion Visible on Aerial In	nagery (C9)		
Algal Mat or Crust (B4)	-		tion in Tilled Soils (C6)	Stunted	d or Stressed Plants (D	1)		
Algai Mat of Crust (B4)	-	Recent from Reduct		_✓ Geomo	orphic Position (D2)			
Inundation Visible on Aerial	Imageny (R7)	Other (Explain in F		Shallov	w Aquitard (D3)			
Sparsely Vegetated Concave	-	_ Other (Explain in r	(emarks)	_✓ Microto	opographic Relief (D4)			
Sparsely vegetated concave	Surface (Bo)			<u></u> ✓ FAC-Ne	eutral Test (D5)			
Field Observations:								
Surface Water Present?	Yes No _	<u>✓</u> Depth	(inches):					
Water Table Present?	Yes No _	✓ Depth	(inches):	Wetland H	lydrology Present?	Yes No		
Saturation Present?	Yes No _		(inches): 0	-	, 6,	·		
	163 _ 110 _	Бериі	(inches).	=				
(includes capillary fringe)								
Describe Recorded Data (stream	n gauge, monitori	ng well, aerial photo:	s, previous inspections), if a	available:				
Remarks:								
The criterion for wetland hydrol	logy is met A nosi	tive indication of we	tland hydrology was obser	ved (nrimar	ry and secondary indic	ators were present)		
The effection for wedaria flyaron	ogy is met. A posi	tive maleation of we	dana nyarology was obser	vea (primar	y and secondary male	ators were presents.		

Tree Stratum (Plot size:30 ft)		Dominant Species?	Indicator Status	Dominance Test work Number of Dominan		2	(A)
. Fraxinus pennsylvanica	5	Yes	FACW	Are OBL, FACW, or FA	AC:		(^)
				Total Number of Dor Across All Strata:	ninant Species	3	(B)
				Percent of Dominant Are OBL, FACW, or FA	•	66.7	(A/B
•				Prevalence Index wo	rksheet:		
•				Total % Cov	er of:	Multiply	By:
•				OBL species	0	x 1 =	0
	5	= Total Cov	er	FACW species	75	x 2 =	150
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
. Rosa multiflora	5	Yes	FACU	FACU species	5	x 4 =	20
·				UPL species	0	x 5 =	0
				Column Totals	80	(A)	170 (E
·					Index = B/A =	2.1	170 (E
							· · ·
·				Hydrophytic Vegetati			
				1- Rapid Test fo		'egetation	
	5	= Total Cov	er	2 - Dominance			
erb Stratum (Plot size: <u>5 ft</u>)		=		3 - Prevalence I			
. Impatiens capensis	70	Yes	FACW	4 - Morphologic			supportir
			171011	data in Remarks or o	•		
-				Problematic Hy			
· -				¹Indicators of hydric		-	gy must b
·				present, unless distu		matic	
•				Definitions of Vegeta	tion Strata:		
·				Tree – Woody plants			diameter
·				breast height (DBH),	•	-	
·				Sapling/shrub - Woo			DBH and
				greater than or equa			
0				Herb – All herbaceou	-		gardless c
1				size, and woody plan			
2.				Woody vines – All wo	ody vines great	er than 3.	.28 ft in
	70	= Total Cov	er	height.			
Voody Vine Stratum (Plot size:30 ft)		-		Hydrophytic Vegetat	tion Present? \	∕es <u> </u>	lo
•				•			
·				•			
•				•			
l							
	0	= Total Cov	er				

Depth Matrix Redox Features		scription: (Describe	to the				ndicato	r or confirm the a	absence of indicato	ors.)
O - 6 108 4/1 100 10R 3/6 10 C M Clay Loam Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ²Location: PL = Pore Lining, M = Matrix.	Depth	Matrix			Feat	ures				
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Hydric Soil Indicators: Hydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (F1) Sandy Medox (S5) Stripped Matrix (S6) Dark Surface (A12) Dark Surface (A12) Sandy Redox (A12) Sandy Redox (A12) Dark Surface (A12) Sandy Redox (A12) Sandy Redox (A12) Dark Surface (A12) Sandy Micky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Almost Surface (A12) Dark Surface (S7) (LRR R, MLRA 149B) West Capacity Pear or Peat (S3) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Hydric Soil Present? Type: None None None Hydric Soil Present? None Hydric Soil Present? None None Hydric Soil Present?	(inches)	Color (moist)	%_	Color (moist)	%	Type ¹	Loc2	Text	ture	Remarks
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix." Hydric Soil Indicators: Histosol (A1)	0 - 6	10B 4/1	100					Silty Cla	y Loam	
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:	6 - 20	10B 6/1	90	10R 3/6	10	C	M	Clay l	Loam	
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:										
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:										
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:										
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:					_			_	_	
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:					_					
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:					_					
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:										
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Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:		-			_					
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:										
Hydric Soil Indicators: — Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR K, L) — Stratified Layers (A5) — Depleted Matrix (F2) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thick Dark Surface (A12) — Depleted Dark Surface (F7) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Dark Surface (A12) — Sandy Redox (S5) — Sandy Redox (S5) — Stripped Matrix (S6) — Dark Surface (S7) (LRR K, L) — Very Shallow Dark Surface (TF12) — Dark Surface (S7) (LRR R, MLRA 149B) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Mesic Spodic (TA6) — Other (Explain in Remarks) ¬Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Depth (inches): Remarks:										
Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) 1 listic Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, R) 1 listic Epipedon (A2) — Loamy Mucky Mineral (F1) (LRR K, L) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) 2 cm Mucky Peat or Peat (S3) (LRR K, L, R) 2 cm Mucky Peat or Peat (S3) (LRR K, L, R) 2 cm Mucky Peat or Peat (S3) (LRR K, L, R) 2 cm Mucky Peat or Peat (S3) (LRR K, L, R) 2 cm Mucky Peat or Peat (S3) (LRR K, L, R) 2 cm Mucky Peat or Peat (S3) (LRR K, L, R) _ 2 cm Mucky Peat or Peat (S3) (LRR K, L) _ 2 cm Mucky Peat or Peat (S3) (LRR K, L) _ 2 cm Mucky Peat or Peat (S3) (LRR K, L) _ 2 cm Mucky Peat or Peat (S3) (LRR K, L) _ 2 cm Mucky Peat or Peat (S3) (LRR K, L) _ 2 cm Mucky Peat or Peat (S3) (LRR K, L) _ 2 cm Mucky Peat or Peat (S3) (LRR K, L) _ 2 cm	¹Type: C =	Concentration, D =	Depleti	ion, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	_ocation: PL = Pore	Lining, M = Matrix.
Histic Epipedon (A2)	Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils³:
Histic Epipedon (A2)	Histoso	ol (A1)		Polyvalue Be	low S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck ((A10) (LRR K. L. MLRA 149B)
Black Histic (A3)Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	Histic E	pipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLR	A 149B)		
— Hydrogen Sulfide (A4) — Loamy Gleyed Matrix (F2) — Dark Surface (S7) (LRR K, L) — Stratified Layers (A5) ✓ Depleted Matrix (F3) — Polyvalue Below Surface (S8) (LRR K, L) — Depleted Below Dark Surface (A11) — Redox Dark Surface (F6) — Thir Dark Surface (S9) (LRR K, L) — Thir Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Iron-Manganese Masses (F12) (LRR K, L, R) — Piedmont Floodplain Soils (F19) (MLRA 149B) — Sandy Gleyed Matrix (S4) — Piedmont Floodplain Soils (F19) (MLRA 149B) — Sandy Redox (S5) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Type: None Hydric Soil Present? Yes No — Depth (inches): Remarks:	Black H	listic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, I	_)		
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Piedmont Floodplain Soils (F19) (MLRA 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Piedmont Floodplain Soils (F19) (MLRA 149B) Characteristic Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Piedmont Floodplain Soils (F19) (MLRA 149B) Characteristic Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Piedmont Floodplain Soils (F19) (MLRA 149B)										
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Depth (inches): Remarks:		•		· ·						
— Inick Dark Surface (A12) — Depleted Dark Surface (F/) — Sandy Mucky Mineral (S1) — Redox Depressions (F8) — Piedmont Floodplain Soils (F19) (MLRA 149B) — Sandy Gleyed Matrix (S4) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Sandy Redox (S5) — Red Parent Material (F21) — Dark Surface (S7) (LRR R, MLRA 149B) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Type: None Hydric Soil Present? Yes No Depth (inches): Remarks:			face (A1						-	
— Sandy Mucky Milreral (S1) — Redox Depressions (F8) — Piedmont Floodplain Soils (F19) (MLRA 149B) — Sandy Gleyed Matrix (S4) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Sandy Redox (S5) — Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): — Type: None Hydric Soil Present? Yes No — Depth (inches): Remarks:		` '		•						
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Depth (inches): Remarks: Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Red Parent Material (F21) Very Shallow Dark Surface (TF12) — Other (Explain in Remarks) Hydric Soil Present? Yes No Depth (inches):)	Redox Depre	essior	ıs (F8)			_	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Pepth (inches): Remarks:	_									•
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks:	-									
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Depth (inches): Remarks:	Strippe	ed Matrix (S6)								
3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks: None Hydric Soil Present? Yes ✓ No	Dark Si	urface (S7) (LRR R, I	MLRA 14	49B)					•	
Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil Present? Yes No No No No No No No No No No	³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must be	e presen	nt, unless disturbe	•	
Type: None Hydric Soil Present? Yes ✓ No Depth (inches): Remarks:			_	<u>, , , , , , , , , , , , , , , , , , , </u>		,				
Depth (inches): Remarks:		•	,	None			Hydric	Soil Present?		Yes / No
Remarks:		• •		TVOTIC			liyanc	John Tesene.		165 <u>v</u> 140
	Damandra	Deptil (iliches).								
		indication of hydric	c soil wa	is observed. The c	riterio	on for hy	dric soil	is met.		

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



Project/Site: Flat Creek Solar Pro	oject	City/County: Spra	akers, Montgomery County	<u>'</u>	Sampling Date: 202	21-Aug-19
Applicant/Owner: SunEast			State: Nev	w York	Sampling Point: W-KC	F-06_UPL-1
Investigator(s): Kevin Ferguson	ո, Brian Corrigan		Section, Township,	Range: NA	4	
Landform (hillslope, terrace, etc.)): Foot slope		Local relief (concave, conv	/ex, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA):	.RR L		Lat: 42.8874219	Long:_	-74.5008569	Datum: WGS84
Soil Map Unit Name: Lansing	silt loam, LaC, 8-15	% slopes			NWI classification	n: None
Are climatic/hydrologic condition	ıs on the site typica	al for this time of ye	ar? Yes 🟒 No	(If no	, explain in Remarks.)	
Are Vegetation, Soil,	or Hydrology _	significantly dis	sturbed? Are "Norm	al Circumst	tances" present?	Yes No
Are Vegetation, Soil,	or Hydrology _	naturally probl	ematic? (If needed,	explain any	y answers in Remarks.	.)
SUMMARY OF FINDINGS – A	Attach site map	showing samplii	ng point locations, trar	nsects, im	portant features,	etc.
Hydrophytic Vegetation Present	? Yes	No _ _ _				
Hydric Soil Present?	Yes .	No _ _ _	Is the Sampled Area withi	in a Wetland	d? Yes	sNo_ <u>-</u> ✓
Wetland Hydrology Present?	Yes _	No _ _ _	If yes, optional Wetland S	ite ID:		
Remarks: (Explain alternative pr						
Wetland Hydrology Indicators: Primary Indicators (minimum of 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-Stained Lea _ Aquatic Fauna (B1 _ Marl Deposits (B1 _ Hydrogen Sulfide _ Oxidized Rhizosph _ Presence of Redu	3) 5) Odor (C1) neres on Living Roots (C3) ced Iron (C4) ction in Tilled Soils (C6) e (C7)	Surface Draina Moss T Dry-Se Crayfis Satura Stunte Geome Shallov Microte	y Indicators (minimum e Soil Cracks (B6) age Patterns (B10) frim Lines (B16) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial II d or Stressed Plants (I orphic Position (D2) w Aquitard (D3) opographic Relief (D4) eutral Test (D5)	magery (C9) D1)
Field Observations:	Waa Na	. Daniel	Construction			
Surface Water Present?	Yes No _	·	(inches):	-[
Water Table Present?	Yes No _	✓ Depth	(inches):	Wetland F	Hydrology Present?	Yes No
Saturation Present?	Yes No _	<u>✓</u> Depth	(inches):	_		
(includes capillary fringe)						
Remarks: The criterion for wetland hydrol						

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant S		2	(4)
1. Acer rubrum	40	Yes	FAC	Are OBL, FACW, or FAC	:		(A)
2. Ostrya virginiana	5	No	FACU	Total Number of Domi	nant Species	5	(B)
3. Tsuga canadensis	5	No	FACU	Across All Strata:			
1.				Percent of Dominant S	•	40	(A/B)
5.				Are OBL, FACW, or FAC			
5.				Prevalence Index work			_
·				Total % Cover		Multiply	-
	50	= Total Cov	er	OBL species	0	x 1 = _	0
Sapling/Shrub Stratum (Plot size:15 ft)		-		FACW species	0	x 2 = _	0
. Fagus grandifolia	50	Yes	FACU	FAC species	45	x 3 = _	135
. Hamamelis virginiana	5	No	FACU	FACU species	75	x 4 =	300
				UPL species	0	x 5 = _	0
·				Column Totals	120	(A)	435 (B)
				Prevalence Ir	ndex = B/A =	3.6	
·				Hydrophytic Vegetation	n Indicators:		
· :				1- Rapid Test for I	Hydrophytic V	egetation/	
•	<u></u> 55	- Total Cov		2 - Dominance Te	est is > 50%		
laula Churchiuma (Diatainea - E.ft)		= Total Cov	er	3 - Prevalence Inc	dex is $\leq 3.0^{1}$		
lerb Stratum (Plot size: <u>5 ft</u>)	_	V	FACIL	4 - Morphological	l Adaptations	(Provide	supporting
. Rosa multiflora	5	Yes	FACU	data in Remarks or on	a separate sh	ieet)	
Fraxinus americana	5	Yes	FACU	Problematic Hydi	. , .	-	
. Urtica dioica	5	Yes	FAC	Indicators of hydric so	il and wetlan	d hydrolog	gy must be
l				present, unless disturb	ed or proble	matic	
j				Definitions of Vegetation	on Strata:		
5				Tree – Woody plants 3	in. (7.6 cm) or	more in o	diameter at
7				breast height (DBH), re	-	_	
3.				Sapling/shrub - Woody			DBH and
)				greater than or equal t			
0				Herb – All herbaceous			gardless of
1				size, and woody plants			
2				Woody vines – All wood	dy vines great	ter than 3.	.28 ft in
	15	= Total Cov	er	height.			
Voody Vine Stratum (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetation	on Present? \	/es N	lo <u> / </u>
:							
,				•			
3.							
				•			
l .		- Total Cov	er	•			
l	0	= Total Cov					

Profile Desc	cription: (Describe	to the de	epth needed to do	cum	ent the i	ndicato	or confirm the	absence of indicators.)	
Depth _	Matrix		Redox						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	-	Texture	Remarks
0 - 6	10YR 4/3	100		_			Sil	lty Clay Loam	
6 - 20	10YR 5/3	100					Gravel	ly Silty Clay Loam	
				_					
				_			-		
			_	_			-		
				_					
			_	_					
				_					
				_					
				_					
				_					
¹Type: C = C	Concentration, D =	Depletio	n, RM = Reduced	Matı	rix, MS =	Masked	Sand Grains. ²	Location: PL = Pore Lining,	M = Matrix.
Hydric Soil		'	•					Indicators for Problema	
Histosol			Polyvalue Bel	ow S	urface (S	8) (RR	R. MLRA 149R)		•
I	pipedon (A2)		Thin Dark Sur					2 cm Muck (A10) (LF	
Black Hi	•		Loamy Mucky					Coast Prairie Redox	
	en Sulfide (A4)		Loamy Gleyed			(=	-,	5 cm Mucky Peat or	
	d Layers (A5)		Depleted Mat					Dark Surface (S7) (L l	
	d Below Dark Surfa							Polyvalue Below Sui	
	ark Surface (A12)		Depleted Dar					Thin Dark Surface (S	
	lucky Mineral (S1)		Redox Depre					Iron-Manganese Ma	
_	Gleyed Matrix (S4)				(,			Piedmont Floodplai	n Soils (F19) (MLRA 149B)
-	ledox (S5)							Mesic Spodic (TA6) (
-								Red Parent Material	l (F21)
	d Matrix (S6)							Very Shallow Dark S	Surface (TF12)
Dark Su	rface (S7) (LRR R, N	/ILRA 149	9B)					Other (Explain in Re	emarks)
3Indicators	of hydrophytic veg	etation a	and wetland hydr	ology	y must be	e presen	t, unless disturb	ed or problematic.	
Restrictive I	_ayer (if observed):	;							
	Type:		None			Hydric	Soil Present?		Yes No _✓
	Depth (inches):								
Remarks:	<u> Берен (шенез).</u>								
	indication of budge	ic coile w	us observed The	crito	rian far l	budric ca	ail is not mot		
No positive	indication of hydri	ic soils w	as observed. The	crite	erion ior i	nyaric so	on is not met.		

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West

