



Photo 47. Palustrine unconsolidated bottom (PUB) wetland, W-JJB-3, in the central section of the Project Area. 6/22/20.



Photo 48. PEM wetland, W-JJB-4, in the eastern section of the Project Area. 11/5/20.





Photo 49. PSS wetland, W-JJB-4, in the eastern section of the Project Area. 11/5/20.



Photo 50. PFO wetland, W-JJB-4, in the eastern section of the Project Area. 11/5/20.





Photo 51. PUB wetland, W-JJB-4, in the eastern section of the Project Area. 11/5/20.



Photo 52. PEM wetland, W-JJB-5, in the eastern section of the Project Area. 11/3/20.





Photo 53. PEM wetland, W-JJB-6, in the eastern section of the Project Area. 11/4/17.



Photo 54. PFO wetland, W-JJB-6, in the eastern section of the Project Area. 11/4/20.





Photo 55. PFO wetland, W-JJB-7, in the southern section of the Project Area. 11/6/20.



Photo 56. PFO wetland, W-JJB-8, in the southern section of the Project Area. 11/6/20.





Photo 57. PUB wetland, W-NSD-1, in the southeastern section of the Project Area. 6/17/20.



Photo 58. PEM wetland, W-NSD-2, in the southeastern section of the Project Area. 6/17/20.





Photo 59. PFO wetland, W-NSD-3, in the southeastern section of the Project Area. 6/17/20.



Photo 60. PEM wetland, W-NSD-4, in the southeastern section of the Project Area. 6/17/20.





Photo 61. PFO wetland, W-NSD-5, in the southeastern section of the Project Area. 6/18/20.



Photo 62. PFO wetland, W-NSD-6, in the southeastern section of the Project Area. 6/18/20.





Photo 63. PUB wetland, W-NSD-7, in the central section of the Project Area. 6/18/20.



Photo 64. PEM wetland, W-NSD-8, in the central section of the Project Area. 6/18/20.





Photo 65. PFO wetland, W-NSD-8, in the central section of the Project Area. 6/18/20.



Photo 66. PEM wetland, W-NSD-9, in the southern section of the Project Area. 6/18/20.





Photo 67. PEM wetland, W-NSD-10, in the southern section of the Project Area. 6/19/20.



Photo 68. PFO wetland, W-NSD-10, in the southern section of the Project Area. 6/19/20.





Photo 69. PEM wetland, W-NSD-11, in the southern section of the Project Area. 6/19/20.



Photo 70. PFO wetland, W-NSD-12, in the southern section of the Project Area. 6/19/20.





Photo 71. PFO wetland, W-NSD-13, in the central section of the Project Area. 6/22/20.



Photo 72. PFO wetland, W-NSD-14, in the central section of the Project Area. 6/23/20.





Photo 73. PEM wetland, W-NSD-15, in the central section of the Project Area. 6/23/20.



Photo 74. PFO wetland, W-NSD-16, in the central section of the Project Area. 6/23/20.

>TRC



Photo 75. PFO wetland, W-NSD-17, in the central section of the Project Area. 6/23/20.



Photo 76. PEM wetland, W-NSD-18, in the central section of the Project Area. 6/23/20.





Photo 77. View of a characteristic row crop area, in the central section of the Project Area. 6/23/20.



Photo 78. View a characteristic upland forested area, in the southern section of the Project Area. 6/19/20.



APPENDIX C USACE Routine Wetland Determination Forms & TRC's Stream Inventory Data Forms

Project/Site: Garnet Energy Center	City/County: Cato, Cayuga	Sampling Date: 2020-June-16
Applicant/Owner: NextEra	State: NY	Sampling Point: W-BTF-01_PEM-1
Investigator(s): Brenner Fahrenz, Ryan Snow	Section, Township, Range:	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none):	Concave Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR R	Lat: 43.1311973512 Long:	-76.6444174253 Datum: WGS84
Soil Map Unit Name: Niagara fine sandy loam		NWI classification: PEM
Are climatic/hydrologic conditions on the site typ	cal for this time of year? Yes _✔_ No (If n	o, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	significantly disturbed? Are "Normal Circums	stances" present? Yes No 🟒
Are Vegetation, Soil, or Hydrolog	naturally problematic? (If needed, explain a	ny answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-BTF-01
Remarks: (Explain alternative procedure Covertype is PEM. Area is wetland, all the agricultural activities.		are present. Ditches/drain tiles observed. Circumst	ances are not normal due to

Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)			Wetland Hydrology Indicators:				
			Primary Indicators (minimum of	one is required; check all	that apply)		Secondary Indicators (minimum of two required)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): No Saturation Present? Yes No Depth (inches): 3 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): No Saturation Present? Yes No Depth (inches): 3 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): No Saturation Present? Yes No Depth (inches): 3 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	 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 	— Aquat — Aquat _ Marl I _ Hydro _ Oxidiz _ Prese _ Recen _ Thin M Imagery (B7) _ Other	tic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) zed Rhizospheres on Living nce of Reduced Iron (C4) ht Iron Reduction in Tilled S Muck Surface (C7)		 Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Surface (BO)			
Saturation Present? Yes _ ✓ No Depth (inches): 3 (includes capillary fringe)	Saturation Present? Yes _ No Depth (inches): 3 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present? Yes _ ✓ No Depth (inches): 3 (includes capillary fringe)	Surface Water Present?	Yes No 🟒	Depth (inches):		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present?	Yes No 🟒	Depth (inches):		- Wetland Hydrology Present? Yes _∠_ No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present?	Yes 🟒 No	Depth (inches):	3	
			(includes capillary fringe)				
						pections), ii	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant	Indicator	Dominance Test work			
		Species?	Status	Number of Dominant	•	1	(A)
·	0			Are OBL, FACW, or FA			
				Total Number of Dom Across All Strata:	inant Species	1	(B)
				Percent of Dominant	Species That		
				- Are OBL, FACW, or FA		100	(A/B)
				Prevalence Index wor			
				Total % Cove		Multiply	Bv:
				- OBL species	25	x 1 =	25
	0	= Total Cov	er	FACW species	80	x 2 =	160
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
	0			- FACU species		x 4 =	0
<u></u>				- UPL species		x 5 =	0
				- Column Totals	105	(A)	185 (B)
·					Index = B/A =	-	105 (B)
•				Hydrophytic Vegetatio		logotation	
·				∠_ 1- Rapid Test for ∠_ 2 - Dominance T		egetation	
	0	= Total Cov	er	✓ 3 - Prevalence Ir			
<u>lerb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica		(Drovido	cupportin
. Phalaris arundinacea	75	Yes	FACW	- data in Remarks or or	-		supportin
. Typha latifolia	15	No	OBL	Problematic Hyd			plain)
3. <i>Glyceria maxima</i>	10	No	OBL	¹ Indicators of hydric s			
A. Solidago gigantea	5	No	FACW	present, unless distur			5)
i				Definitions of Vegetat	ion Strata:		
				Tree – Woody plants 3		more in o	diameter a
				breast height (DBH), r	egardless of h	eight.	
				Sapling/shrub - Wood	ly plants less th	han 3 in. D	OBH and
				greater than or equal	to 3.28 ft (1 m) tall.	
0				Herb – All herbaceous	s (non-woody)	plants, reg	gardless o
1				size, and woody plant			
2.				Woody vines – All woo	ody vines great	er than 3.	28 ft in
	105	= Total Cov	er	height.			
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetati	on Present?	/es N	lo
I.	0						
3.				-			
1.				•			
	0	= Total Cov	er	-			
		10001 000	. .	1			

SOIL

	•	to the d	•			indicato	r or confirm the a	bsence of indicators.)
Depth	Matrix		Redox			12	T	Descender
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 10	10YR 3/2	100		·			Loam	
10 - 20	10YR 3/1	90	10YR 2/1	10	C	M	Clay	
				·				
				·				
				· <u> </u>				
	Concontration D -	Doplati				Maskad	Cand Crains 2	ecotion, DL - Dere Lining, M - Matrix
	Concentration, D =	Depleti	on, Rivi – Reduced	livial	11X, IVIS –	waskeu		.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 Muck	-		(LKK K, I	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 Surf	262 (11	Depleted Ma					Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)	ace (AT	Depleted Da			`		Thin Dark Surface (S9) (LRR K, L)
	lucky Mineral (S1)		Redox Depre)		Iron-Manganese Masses (F12) (LRR K, L, R)
				255101	IS (FO)			Piedmont Floodplain Soils (F19) (MLRA 149B)
-	ileyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
-	edox (S5)							Red Parent Material (F21)
	d Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, I	MLRA 14	9B)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	ed or problematic.
-	ayer (if observed)					T.		
	Type:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks:	Deptil (inches).			·				
A positive ir	ndication of hydric	soil wa	s observed.					

Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



Project/Site: Garnet End	ergy Center		City/County: Cato, Cayu	ıga			Sampling Date:	2020-June-16
Applicant/Owner: Ne	extEra			State:	NY		Sampling Point: \	N-BTF-01_PFO-1
Investigator(s): Brenn	ner Fahrenz, F	lyan Snow		Section, Town	iship, Ra	nge:		
Landform (hillslope, terr	race, etc.):	Swamp	Local	relief (concave,	convex,	none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA	A): LRR F	R		Lat: 43.13122	262837	Long:	-76.6440057142	Datum: WGS84
Soil Map Unit Name:	Niagara fine	sandy loam					NWI classific	ation: PFO
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)								
Are Vegetation, S	Soil,	or Hydrology	significantly disturbe	d? Are "N	Normal C	ircums	tances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally problemati	c? (If nee	eded, exp	olain an	y answers in Rema	arks.)

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

Hydrophytic Vegetation Present?	Yes No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-BTF-01
Remarks: (Explain alternative procedures he	re or in a separate report		
Covertype is PFO. Area is wetland, all three w	vetland parameters are pr	resent.	

Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)			Wetland Hydrology Indicators:				
→ Note: Visitine Cetter(Visition) ✓ High Water Table (A2) ✓ Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) ✓ Crayfish Burrows (C8) ✓ Saturation Visible on Aerial Imagery (C9) ✓ Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) ✓ Geomorphic Position (D2) Iron Deposits (B5) — Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) — Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Microtopographic Relief (D4) Saturation Present? Yes No Depth (inches): 9 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	→ Midde View Control (View) → Link View Control (Control (Contro) (Contro) (Control (Contro) (Contro) (Contro) (Cont		Primary Indicators (minimum o	f one is required; check al	l that apply)		Secondary Indicators (minimum of two required
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): 11 Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): 9 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): 11 Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): 9 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): 11 Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): 9 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	 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 	Aqua Marl Hydro Oxidi Prese Recer Thin Imagery (B7) Other	tic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) zed Rhizospheres on Livin ence of Reduced Iron (C4) nt Iron Reduction in Tilled Muck Surface (C7)	-	 Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		e Surface (B8)			FAC-Neutral Test (D5)
Saturation Present? Yes 🖌 No Depth (inches): 9 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present? Yes _ No Depth (inches): 9 (includes capillary fringe)	Saturation Present? Yes 🖌 No Depth (inches): 9 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Yes No 🟒	Depth (inches):		
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Nater Table Present?	Yes 🟒 No	Depth (inches):	11	ー Wetland Hydrology Present? Yes _∠_ № _
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present?	Yes 🟒 No	Depth (inches):	9	
			(includes capillary fringe)				
				m gauge, monitoring wei,		spections, in	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01_PFO-1

		Indicator Status				
		FAC			4	(A)
		FACW	Total Number of Domin	nant Species	4	(B)
5	No	FAC	Across All Strata:		-	(D)
5	No	FACW			100) (A/B)
					Multiph	, D. e
						<u>ву.</u> 80
100	= Total Cov	er	-			80
			· · ·			255
20	Yes	FACW	· · · ·			235
5	Yes	FAC	-			0
			-			435 (B
			-			435 (B
						·
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ogotatio	n
					egetatio	11
25	= Total Cov	er				
					(Provide	supportin
75	Yes	OBL				supportin
5	No	OBL				xplain)
5	No	FACU	-			•
			· · · · · · · · · · · · · · · · · · ·			
			•		more in	diameter a
			breast height (DBH), re	gardless of he	eight.	
			Sapling/shrub - Woody	plants less th	nan 3 in.	DBH and
			greater than or equal t	o 3.28 ft (1 m)) tall.	
						egardless o
			-	dy vines great	er than 3	3.28 ft in
85	= Total Cov	er	height.			
			Hydrophytic Vegetatio	n Present? Y	′es 🟒	No
0	= Total Cov	or				
	% Cover 75 15 5 5 100 20 5 20 5 20 5 5 5 75 5 5 75 5	% Cover Species? 75 Yes 15 No 5 No 5 No 100 = Total Cov 20 Yes 5 Yes 20 Yes 5 Yes 5 Yes 20 Yes 5 Yes 5 Yes 5 Yes 5 No 25 = Total Cov 75 Yes 5 No 5 No 5 No 3	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	% Cover Species? Status 75 Yes FAC 15 No FACW 5 No FACW 75 Yes FACW 100 = Total Cover FACW 20 Yes FACW 5 Yes FAC 20 Yes FACW 5 Yes FAC 9 Could % Cover OBL species 6 Column Totals Prevalence Index worke 100 = Total Cover FACW 5 Yes FAC 9 Yes FAC 9 Yes FAC 9 Yes OBL 10 = Total Cover - 25 Yes OBL 75 Yes OBL 5 No OBL <	% Cover Species? Status Number of Dominant Species That 75 Yes FAC 15 No FACW 5 No FACW 700 = Total Cover Prevalence Index worksheet: 100 = Total Cover GBL species 80 75 Yes FACW FACW species 40 FAC species 85 5 UPL species 0 20 Yes FACW FACU species 0 20 Yes FAC UPL species 0 20 Yes FAC UPL species 0 20 Yes FAC UPL species 0 210	% CoverSpecies?StatusNumber of Dominant Species That Are OBL, FACW, or FAC:4 $\overline{5}$ NoFACWTotal Number of Dominant Species That Are OBL, FACW, or FAC:4 $\overline{5}$ NoFACWPercent of Dominant Species That Are OBL, FACW, or FAC:100 $\overline{5}$ NoFACWPercent of Dominant Species That Are OBL, FACW, or FAC:100 $\overline{5}$ NoFACWPercent of Dominant Species That Are OBL, FACW, or FAC:100 $\overline{5}$ NoFACWPrevalence Index worksheet:100 $\overline{100}$ = Total Cover \overline{AC} species $\overline{80}$ $\times 1 =$ $\overline{100}$ = Total Cover \overline{AC} species $\overline{80}$ $\times 1 =$ $\overline{20}$ YesFACW \overline{FACW} $\overline{5}$ $\times 4 =$ $\overline{5}$ YesFACUPL species $\overline{0}$ $\times 5 =$ $\overline{20}$ YesFAC $\overline{100}$ $\overline{210}$ (A) $\overline{25}$ = Total Cover $\overline{2}$ $\overline{2}$ $\overline{2}$ $\overline{2}$ $\overline{25}$ = Total Cover $\overline{4}$ $\overline{4}$ Morphological Adaptations1 (Provide data in Remarks or on a separate sheet) $\underline{-}$ $\overline{1}$ $\overline{5}$ NoOBL $\overline{5}$ No $\overline{6}$ $\overline{2}$ $\overline{1}$ $\overline{5}$ NoDBL $\overline{5}$ $\overline{1}$ $\overline{1}$ $\overline{1}$ $\overline{1}$ $\overline{5}$ NoDBL $\overline{5}$ $\overline{1}$ $\overline{1}$ $\overline{1}$ $\overline{1}$ $\overline{5}$ NoDBL $\overline{5}$ $\overline{1}$ $\overline{1}$ $\overline{1}$ $\overline{1}$ $\overline{5}$

SOIL

Sampling Point: W-BTF-01_PFO-1

9-16 10YR 6/3 60 10YR 5/8 40 C M Sandy Loam 9-16 10YR 6/3 60 10YR 5/8 40 C M Sandy Loam 9-16 10YR 5/8 40 C M Sandy Loam 9-16 10YR 5/8 40 C M Sandy Loam 9 10YR 5/8 10 Polyvalue Below Surface (S3) (LRR R, MLRA 149B) Indicators for Problematic Hydric Soils?: 11 110 ark Surface (S3) (LRR R, MLRA 149B) 2 cm Muck (A10) (LR K, L, N) Scast Prairie Redox (A16) (LR K, L, R) 12 110 ark Surface (A11) Loamy Mucky Mineral (F1) (LRR K, L) Scast Prairie Redox (A16) (LR K, L, R) 13 12 peleted Dark Surface (F2) Depleted Dark Surface (F7) Thin D	(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Indicators: Indicators for Problematic Hydric Soils?: Histosol (A1)	0 - 9	10YR 2/1	100					Loam	
dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Stratified Layers (S4) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Red Parent Material (F21) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yery Shallow Dark Surface (TF12) Other (Explain in Remarks)	9 - 16	10YR 6/3	60	10YR 5/8	40	С	Μ	Sandy Loar	n
dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Stratified Layers (S4) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Red Parent Material (F21) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yery Shallow Dark Surface (TF12) Other (Explain in Remarks)									
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dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Stratified Layers (S4) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Red Parent Material (F21) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yery Shallow Dark Surface (TF12) Other (Explain in Remarks)									
dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Stratified Layers (S4) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Red Parent Material (F21) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yery Shallow Dark Surface (TF12) Other (Explain in Remarks)									
dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Stratified Layers (S4) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Red Parent Material (F21) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yery Shallow Dark Surface (TF12) Other (Explain in Remarks)									
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Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2)			Depleti	on, RM = Reduced	Matr	ix, MS = I	Masked Sand Gr		
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B)				Polyvalue Be		irface (S		1 400)	-
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L)	_			,		-		-	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Ino Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Redox (S5)									
Stratified Layers (A5)	Hydrog	gen Sulfide (A4)		Loamy Gleye	d Mat	rix (F2)		-	
Depleted Below Dark Surface (A11)		-						-	
			ace (A11					-	-
	-								
_ Sandy Gleyed Matrix (S4)				Redox Depre	ssion	s (F8)			-
_ Sandy Redox (S5) _ Stripped Matrix (S6) _ Dark Surface (S7) (LRR R, MLRA 149B) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: Hard clay/hard pan Depth (inches): 16 Hydric Soil Present? Yes ✓ No									
_ Stripped Matrix (S6) _ Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: Hard clay/hard pan Hydric Soil Present? Yes _✓_ No	-								• • • • • • • • • • • • • • • • • • • •
_ Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: Hard clay/hard pan Hydric Soil Present? Yes _✓_ No Depth (inches): 16	Strippe	ed Matrix (S6)							
strictive Layer (if observed): Hard clay/hard pan Hydric Soil Present? Yes ∠ No Type: Hard clay/hard pan Hydric Soil Present? Yes ∠ No Depth (inches): 16 16	_ Dark S	urface (S7) (LRR R, N	/LRA 14	9B)				-	-
Type: Hard clay/hard pan Hydric Soil Present? Yes _ / No Depth (inches): 16	ndicators	s of hydrophytic veg	etation	and wetland hyd	rology	must be	present, unless	disturbed	or problematic.
Depth (inches): 16	estrictive	Layer (if observed)	:						
		Туре:	Hare	d clay/hard pan	_		Hydric Soil Pres	sent?	Yes 🟒 No
marks:		Dopth (inchos):		16					
		Depth (inches).							
	marks:	Depth (inches).							
	marks:	Deptil (inches).							
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	emarks:	Depth (inches).							
	emarks:	Depth (inches).							
	emarks:	Depth (inches).							

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot South

Project/Site: Garnet E	nergy Center	C	ity/County: Cato,	Cayuga			Sampling Date:	2020-June-1	6
Applicant/Owner: N	extEra				State: NY		Sampling Point: W	/-BTF-01_PFC)-2
Investigator(s): Bren	ner Fahrenz, R	yan Snow		Sec	tion, Township, Ra	inge:			
Landform (hillslope, te	rrace, etc.):	Hillslope	L	ocal relie	f (concave, convex	, none):	Concave	Slope (%): 2 to 5
Subregion (LRR or MLF	RA): LRR R			Lat:	43.1347491678	Long:	-76.6422522181	Datum:	WGS84
Soil Map Unit Name:	Appleton and	l Lyons soils, 0 to	3 percent slopes				NWI classifica	tion: PFO	
Are climatic/hydrologic	c conditions on	the site typical for	or this time of yea	r?	Yes 🟒 No 🔄	(lf no	o, explain in Remarl	<s.)< td=""><td></td></s.)<>	
Are Vegetation, Are Vegetation,			_ significantly dist _ naturally proble				tances" present? ly answers in Rema		No 🟒

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

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-BTF-01
Remarks: (Explain alternative procedures he	ere or in a separate report)	
Covertype is PFO. Area is wetland, all three w	wetland parameters are p	resent. Ditches/drain tiles observed.	

			Wetland Hydrology Indicators:			
			Primary Indicators (minimum of	one is required; check al	<u>l that apply)</u>	Secondary Indicators (minimum of two required)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			 High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) 	Aqua Marl Hydri Oxidi Prese Recei	tic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) zed Rhizospheres on Living ence of Reduced Iron (C4) nt Iron Reduction in Tilled S	 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)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): 6 Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): 6 Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): 6 Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Inundation Visible on Aerial I	magery (B7) Other	r (Explain in Remarks)	Microtopographic Relief (D4)
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	; ; ;	Surface (B8)		FAC-Neutral Test (D5)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present? Water Table Present? Saturation Present?	Yes 🖌 No	Depth (inches):	 _ _ Wetland Hydrology Present? Yes _∠_ № _
			(includes capillary fringe)			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01_PFO-2

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	5	(•)
. Thuja occidentalis	45	Yes	FACW	Are OBL, FACW, or FAC:	5	(A)
2. Acer rubrum	45	Yes	FAC	Total Number of Dominant Species	6	(B)
3. Fraxinus pennsylvanica	5	No	FACW	Across All Strata:		(0)
ł				Percent of Dominant Species That Are OBL, FACW, or FAC:	83.3	(A/B)
5				Prevalence Index worksheet:		
				Total % Cover of:	Multiply B	sv:
				OBL species 80	x 1 =	80
	95	= Total Cov	er	FACW species 70	x 2 =	140
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 45	x 3 =	135
. Lindera benzoin	5	Yes	FACW	FACU species 15	x 4 =	60
. Cornus amomum	5	Yes	FACW	UPL species 0	x 5 =	0
				Column Totals 210	(A)	415 (B)
k					· · · -	413 (B)
i.				Prevalence Index = B/A =	2	
				Hydrophytic Vegetation Indicators:		
				1- Rapid Test for Hydrophytic	Vegetation	
	10	= Total Cov	er	2 - Dominance Test is >50%		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u>)		Total Cov		$_ \checkmark$ 3 - Prevalence Index is ≤ 3.0 ¹		
. Symplocarpus foetidus	80	Yes	OBL	4 - Morphological Adaptations	-	upporting
. Impatiens capensis	10	No	FACW	data in Remarks or on a separate s	-	
. <u>Impatiens capensis</u>	10	INU	FACW	Problematic Hydrophytic Vege		
				¹ Indicators of hydric soil and wetlar	, 0.	y must be
k				present, unless disturbed or proble	matic	
				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm) c		iameter a
				breast height (DBH), regardless of h		
l				Sapling/shrub – Woody plants less		BH and
)				greater than or equal to 3.28 ft (1 n		
0				Herb – All herbaceous (non-woody)		ardless of
1				size, and woody plants less than 3.2		
2				Woody vines – All woody vines grea	iter than 3.2	:8 ft in
		= Total Cov	er	height.		
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present?	Yes 🟒 No	<u></u> د
. Parthenocissus quinquefolia	15	Yes	FACU			
2.						
3.						
 I.						
···	15	= Total Cov	er			
			C1			

SOIL

Sampling Point: W-BTF-01_PFO-2

Profile Des Depth	cription: (Describe Matrix	to the d	epth needed to d Redox			ndicato	r or confirm the	absence of indicators	.)
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Те	exture	Remarks
0 - 3	10YR 2/1	100			турс			atter Muck	Remarks
3 - 14	10YR 2/1	100		· —				Loam	
				15				LUdili	
14 - 16	10YR 5/3	85	10YR 5/8	15					
<u> </u>								· ·	
				·					
1 Type: C = 0	Concentration, D =	Depletio	on, RM = Reduced	Mati	rix, MS =	Masked	Sand Grains. 2	Location: PL = Pore Li	ning, M = Matrix.
Hydric Soil									blematic Hydric Soils ³ :
Histoso			Polwalue Be	low S	urface (S	8) (I RR	R, MLRA 149B)		
	oipedon (A2)		Thin Dark Su						0) (LRR K, L, MLRA 149B)
	istic (A3)		Loamy Muck						edox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye	-		. ,	,	,	eat or Peat (S3) (LRR K, L, R)
Stratifie	d Layers (A5)		Depleted Ma					Dark Surface (S	w Surface (S8) (LRR K, L)
Deplete	d Below Dark Surf	ace (A11						Thin Dark Surfa	
Thick D	ark Surface (A12)		Depleted Da	rk Sui	face (F7)	1			se Masses (F12) (LRR K, L, R)
Sandy N	/lucky Mineral (S1)		Redox Depre	essior	is (F8)			0	
Sandy C	Gleyed Matrix (S4)								dplain Soils (F19) (MLRA 149B)
Sandy F	Redox (S5)								TA6) (MLRA 144A, 145, 149B)
Strippe	d Matrix (S6)							Red Parent Ma Very Shallow D	
Dark Su	irface (S7) (LRR R, M	MLRA 14	9B)					Other (Explain	
									in Kentarks)
-		-	and wetland hyd	rolog	y must be	e preser	it, unless disturb	ed or problematic.	
	Layer (if observed)					مأمط	Coll Duocout2	,	Vee (Ne
	Type:	Ha	ard pan layer			Hydric	Soil Present?		Yes 🟒 No
-	Depth (inches):		16						
Remarks:									

Project/Site: Garnet Energy C	Center C	City/County: Cato, Cayuga		Sampling Date: 202	0-June-16
Applicant/Owner: NextEra			State: NY	Sampling Point: W-BT	F-01_UPL-1
Investigator(s): Brenner Fa	hrenz, Ryan Snow	Section	n, Township, Range:		
Landform (hillslope, terrace, e	etc.): Low Hill	Local relief (co	oncave, convex, non	e): Convex	Slope (%): 1 to 3
Subregion (LRR or MLRA):	LRR R	Lat: 43	8.1311324528 Lor	ng: -76.6441468424	Datum: WGS84
Soil Map Unit Name: Niaga	ara fine sandy loam			NWI classification	n: None
Are climatic/hydrologic condi	tions on the site typical f	for this time of year?	Yes 🟒 No (I	f no, explain in Remarks.)	
Are Vegetation, Soil	🟒 , or Hydrology 🟒	_ significantly disturbed?	Are "Normal Circu	mstances" present?	Yes No 🟒
Are Vegetation, Soil	_, or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a senarate reno	urt)	

Remarks: (Explain alternative procedures here or in a separate report)

Covertype is UPL. Area is upland, not all three wetland parameters are present. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities. Active cornfield .

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	ne is required; check all t	<u>hat apply)</u>	Secondary Indicators (minimum of two required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Aquatio Marl D Hydrog	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3)	 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)
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave St 	Recent Thin M Jagery (B7) Other (ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	 Studiation Visible on Achien Integery (CS) Studied or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	
Saturation Present?	Yes No 🟒	Depth (inches):	-
(includes capillary fringe)			-
Describe Recorded Data (stream g	gauge, monitoring well, a	erial photos, previous inspections), if	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01_UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test work		2	
1. Acer rubrum	40	Yes	FAC	Are OBL, FACW, or FA	C:	3	(A)
2. Acer negundo	8	No	FAC	Total Number of Dom	inant Species	6	(B)
3. <i>Tilia americana</i>	8	No	FACU	Across All Strata:			(D)
4.				Percent of Dominant		50	(A/B)
г.				Are OBL, FACW, or FA			(, , , , , , , , , , , , , , , , , , ,
				Prevalence Index wor			
o 7.				Total % Cove	er of:	<u>Multiply</u>	<u>By:</u>
··	56	= Total Cov	or	OBL species	0	x 1 =	0
Carling/Church Stratum (Distaires 15 ft)			ei	FACW species	5	x 2 =	10
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	10		FAC	FAC species	68	x 3 =	204
1. <i>Rhamnus cathartica</i>	10	Yes	FAC	FACU species	73	x 4 =	292
2				UPL species	40	x 5 =	200
3				Column Totals	186	(A)	706 (B)
4				Prevalence	Index = B/A =	3.8	
				Hydrophytic Vegetatio			
				1- Rapid Test for		logotation	
7				2 - Dominance T		egetation	
	10	= Total Cov	er				
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				3 - Prevalence In		(Drovido	cupporting
1. Solidago canadensis	30	Yes	FACU	4 - Morphologica data in Remarks or or	•	-	supporting
2. Zea mays	30	Yes	UPL	Problematic Hyd	•		(niclo
3. Solidago altissima	15	No	FACU	¹ Indicators of hydric s			
4. Asclepias syriaca	10	No	UPL	present, unless distur			gy must be
5. Alliaria petiolata	10	No	FACU	Definitions of Vegetat		natic	
5. Phalaris arundinacea	5	No	FACW	Tree – Woody plants 3		moroin	diamotor a
7.				breast height (DBH), r			alameter a
3.				Sapling/shrub – Wood	•	-)BH and
).				greater than or equal	51		Diruna
				Herb – All herbaceous			ardless of
				size, and woody plant			541 41055 01
11				Woody vines - All woo			.28 ft in
12				height.			
	100	= Total Cov	er	Hydrophytic Vegetati	on Precent?		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				i iyai opiiyac vegetati		.c.s I	··· _ ·
1. <i>Toxicodendron radicans</i>	10	Yes	FAC				
2. Parthenocissus quinquefolia	10	Yes	FACU				
3							
4							
	20	= Total Cov	er				

Active agricultural field.

SOIL

	cription: (Describe	to the d	•			indicato	r or confirm the a	bsence of indic	ators.)	
Depth	Matrix		Redox				_			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0 - 6	10YR 3/2	100					Loam			
6 - 15	10YR 2/1	90	10YR 4/4	10	C	М	Clay Loa	am		
15 - 20	10YR 4/1	90	10YR 4/6	10	C	М	Clay			
				·						
				·						
				· —						
				·	·			·		
1Tupo: C = (Concontration D -	Doplati	on DM - Doducor			Mackod	Sand Grains 21		ore Lining, M = Matrix.	
-		Depleti	on, Rivi – Reduced	i wau	IX, IVIS –	waskeu	Saliu Grains. *L			
Hydric Soil					с <i>(</i> с			Indicators for	[•] Problematic Hydric Soils ³ :	
Histoso							R, MLRA 149B)	2 cm Muc	k (A10) (LRR K, L, MLRA 149B)	
	pipedon (A2) istic (A3)		Thin Dark Su					Coast Pra	irie Redox (A16) (LRR K, L, R)	
	en Sulfide (A4)		Loamy Gleye	-			L)		ky Peat or Peat (S3) (LRR K, L, R)	
	ed Layers (A5)		Depleted Ma						ace (S7) (LRR K, L)	
	d Below Dark Surf	face (A11							Below Surface (S8) (LRR K, L)	
	ark Surface (A12)		Depleted Da)			: Surface (S9) (LRR K, L)	
	Mucky Mineral (S1)		Redox Depre			,			ganese Masses (F12) (LRR K, L, R)	
,	Gleyed Matrix (S4)								Floodplain Soils (F19) (MLRA 149B)	
-	Redox (S5)							•	odic (TA6) (MLRA 144A, 145, 149B)	
-	d Matrix (S6)								nt Material (F21)	
	urface (S7) (LRR R, I								low Dark Surface (TF12)	
Dark St			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					Other (Ex	plain in Remarks)	
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	ed or problemat	tic.	
Restrictive	Layer (if observed)):								
	Туре:		None			Hydric	Soil Present?	Ye	s No 🟒	
	Depth (inches):									
Remarks:										
No evidend	e of frequent pon	ding, or	a water table with	nin 1 f	oot of th	ie surfac	e was observed.	Soil significantly	disturbed as a result of tilling. Dry h	iole.

Soil Photos



Photo of Sample Plot East Photo of Sample Plot South



Project/Site: Garnet End	ergy Center		City/County: Cato,	Cayuga			Sampling Date:	2020-June-1	6
Applicant/Owner: Ne	extEra				State: NY		Sampling Point:	W-BTF-01_UP	L-2
Investigator(s): Brenn	ner Fahrenz, F	yan Snow		Sec	tion, Township, Ra	ange:			
Landform (hillslope, terr	race, etc.):	Hillslope	I	_ocal relief	(concave, convex	, none):	Convex	Slope (%): 2 to 5
Subregion (LRR or MLRA	A): LRR F	1		Lat:	43.1344999493	Long:	-76.6418479988	Datum:	WGS84
Soil Map Unit Name:	Galen fine sa	ndy loam, 2 to 6	5 percent slopes				NWI classific	cation: None	
Are climatic/hydrologic	conditions on	the site typical	for this time of yea	r?	Yes 🟒 No _	(If no	o, explain in Rema	rks.)	
Are Vegetation,	Soil 🟒,	or Hydrology	🖊 significantly dist	turbed?	Are "Normal	Circums	tances" present?	Yes	No 🖌
Are Vegetation,	Soil,	or Hydrology	naturally proble	matic?	(If needed, ex	plain ar	y answers in Rem	arks.)	

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

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

alternative procedures here or ks: (Explair n a separate report)

Covertype is UPL. Area is upland, not all three wetland parameters are present. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities. Circumstances are not normal due to mowing of vegetation.

Wetland Hydrology Indicators:			
Primary Indicators (minimum of or	ne is required; check all t	<u>hat apply)</u>	Secondary Indicators (minimum of two required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Aquati Marl D Hydrog	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3)	 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)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Su	Recent Thin M agery (B7) Other (ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) (Explain in Remarks)	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	— Wetland Hydrology Present? Yes No _∠
Saturation Present?	Yes No 🟒	Depth (inches):	_
(includes capillary fringe)			-
Describe Recorded Data (stream g	auge, monitoring well, a	erial photos, previous inspections), il	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01_UPL-2

ree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That	2	(A)
. Acer rubrum	20	Yes	FAC	Are OBL, FACW, or FAC:	Z	(A)
2. <i>Liriodendron tulipifera</i> 3.	20	Yes	FACU	Total Number of Dominant Species Across All Strata:	10	(B)
 				Percent of Dominant Species That Are OBL, FACW, or FAC:	20	(A/B)
				Prevalence Index worksheet:		
				- <u>Total % Cover of:</u>	Multiply	Bv:
·				- OBL species 0	x 1 =	<u>ру.</u> О
	40	= Total Cov	er	FACW species 10	x 2 =	20
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 30	-	90
. Liriodendron tulipifera	15	Yes	FACU		x 3 =	
2. Fraxinus pennsylvanica	5	Yes	FACW		× 4 =	420
B. Rosa multiflora	5	Yes	FACU	· · · · · · · · · · · · · · · · · · ·	x 5 =	250
. Rubus idaeus	5	Yes	FACU	- Column Totals 195	(A)	780 (B
				Prevalence Index = B/A =	4	
		·		Hydrophytic Vegetation Indicators:		
··				1- Rapid Test for Hydrophytic V	/egetation	
	30	= Total Cov	or	2 - Dominance Test is > 50%		
lorb Stratum (Diat cize) 5 ft				3 - Prevalence Index is $\leq 3.0^1$		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u>) . <i>Zea mays</i>	50	Yes	UPL	4 - Morphological Adaptations	¹ (Provide :	supportin
	25	Yes	FACU	- data in Remarks or on a separate sh	neet)	
	10	No	FACU	Problematic Hydrophytic Vege		
				¹ Indicators of hydric soil and wetlan	, ,	gy must b
Rubus idaeus	10	No	FACU	present, unless disturbed or proble	matic	
. Toxicodendron radicans		No	FAC	Definitions of Vegetation Strata:		
. Impatiens capensis	5	No	FACW	Tree – Woody plants 3 in. (7.6 cm) o		diameter a
·				breast height (DBH), regardless of h	-	
3				Sapling/shrub – Woody plants less t)BH and
)				greater than or equal to 3.28 ft (1 m		
0				Herb – All herbaceous (non-woody)		zardless o
1				size, and woody plants less than 3.2		20.66
2				Woody vines – All woody vines grea	ter than 3.	28 π in
	110	= Total Cov	rer	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present?	Yes 🟒 N	0
. Parthenocissus quinquefolia	10	Yes	FACU			
. Vitis aestivalis	5	Yes	FACU	-		
3.		. <u> </u>		-		
l.				-		
	15	= Total Cov	er	-		

SOIL

Profile Desc	ription: (Describe	to the o	depth needed to o	docun	nent the	indicato	r or confirm the a	absence of indicators.)
Depth	Matrix		Redox	(Featu	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 20	10YR 3/3	85	10YR 3/6	15	C	M	Loam	
				·	<u> </u>			
<u> </u>				·	<u> </u>			
				·	. <u> </u>			
				·				
							-	
		Deplet	on, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ²	Location: 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 Muck	-		(LRR K, I	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)		Depleted Ma					Polyvalue Below Surface (S8) (LRR K, L)
	d Below Dark Surfa	ace (A1						Thin Dark Surface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da)		Iron-Manganese Masses (F12) (LRR K, L, R)
,	lucky Mineral (S1)		Redox Depr	essior	ıs (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	ileyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)							Red Parent Material (F21)
Stripped	d Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 14	49B)					Other (Explain in Remarks)
	· · · · ·		and wetland hyc	Irolog	y must b	e preser	nt, unless disturb	ed or problematic.
	_ayer (if observed):							
	Туре:		None			Hydric	Soil Present?	Yes No
	Depth (inches):							
Remarks:								
1								
1								
1								
1								
1								

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet Energy Center	City/County: Cato, Cayuga	Sampling Date: 20)20-June-16
Applicant/Owner: NextEra	State: NY	Sampling Point: W-E	3TF-02_PEM-1
Investigator(s): Brenner Fahrenz, Ryan Snow	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, non	e): Concave	Slope (%): 1 to 10
Subregion (LRR or MLRA): LRR R	Lat: 43.1359796731 Lor	ng:76.6395157233	Datum: WGS84
Soil Map Unit Name:Hilton loam, 3 to 8 percent	t slopes	NWI classificati	on: PEM
Are climatic/hydrologic conditions on the site typic	al for this time of year? Yes _∠_ No (If	no, explain in Remarks	.)
Are Vegetation 🟒, Soil 🟒, or Hydrology	_∠_ significantly disturbed? Are "Normal Circui	mstances" present?	Yes No 🟒
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain	any answers in Remark	s.)

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

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-BTF-02
Remarks: (Explain alternative procedur	es here or in a separate repo	rt)	

Covertype is PEM. Area is wetland, all three wetland parameters are present. ATV/ORV impacts observed. Circumstances are not normal due to agricultural activities. Circumstances are not normal due to mowing of vegetation. Ditches/drain tiles observed.

HYDROLOGY

Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required)		Wetland Hydrology Indicators:				
		Primary Indicators (minimum of c	one is required; check all	that apply)	Secondary Indicators (minimum o	f two required)
 ✓ Algal Mat or Crust (B4) ✓ Recent Iron Reduction in Tilled Soils (C6) ✓ Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) ✓ Sparsely Vegetated Concave Surface (B8) ✓ FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No ✓ Depth (inches): Water Table Present? Yes No ✓ Depth (inches): Saturation Present? Yes No ✓ Depth (inches): Metland Hydrology Present? Yes No ✓ Depth (inches): 	 ✓ Algal Mat or Crust (B4) ✓ Recent Iron Reduction in Tilled Soils (C6) ✓ Geomorphic Position (D2) ✓ Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Saturation Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Saturation Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Cincludes capillary fringe) Depth (inches): Wetland Hydrology Present? Yes No ✓	High Water Table (A2) Saturation (A3) Water Marks (B1)	Aquat Marl E Hydro	ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1)	 Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) 	agery (C9)
Field Observations: Surface Water Present? Yes No _ Depth (inches): Water Table Present? Yes No _ Depth (inches): Saturation Present? Yes No _ Depth (inches): (includes capillary fringe)	Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	✓ Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In	Recen Thin № nagery (B7) Other	t Iron Reduction in Tilled Soils (C6) Juck Surface (C7)	 Stunted or Stressed Plants (D1 Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) 	
Water Table Present? Yes No _ Depth (inches): Saturation Present? Yes No _ Depth (inches): (includes capillary fringe)	Water Table Present? YesNo _ Depth (inches):Wetland Hydrology Present? Saturation Present? YesNo _ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Saturation Present? Yes No Z Depth (inches):	Saturation Present? Yes No C Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present?	Yes No 🟒	Depth (inches):		
(includes capillary fringe)	(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes 🟒 No _
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present?	Yes No 🟒	Depth (inches):	-	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		(includes capillary fringe)			-	
Remarks:			gauge, monitoring well, a	erial photos, previous inspections), if	available:	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-02_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute	Dominant	Indicator	Dominance Test workshe			
		Species?	Status	Number of Dominant Spe Are OBL, FACW, or FAC:	cies That	1	(A)
	0	·		Total Number of Dominal	nt Snecies		
		·		Across All Strata:	it species	1	(B)
·		<u> </u>		Percent of Dominant Spe	cies That	100	
·		·		Are OBL, FACW, or FAC:		100	(A/B)
		·		Prevalence Index worksh	eet:		
		·		- <u>Total % Cover of</u>	:	Multiply	<u>By:</u>
		- Tatal Cau		- OBL species	0	x 1 =	0
and a state of the	0	= Total Cov	er	FACW species	35	x 2 =	70
apling/Shrub Stratum (Plot size: <u>15 ft</u>)	0			FAC species	0	x 3 =	0
·	0	·		- FACU species	0	x 4 =	0
				- UPL species	0	x 5 =	0
·				- Column Totals	35	(A)	70 (B)
		·		Prevalence Inde	ex = B/A =		
·		·		Hydrophytic Vegetation I	ndicators:		
·				1- Rapid Test for Hy		egetation	
·				- 2 - Dominance Test		0	
	0	= Total Cov	er	✓ 3 - Prevalence Index	is ≤ 3.0 ¹		
erb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological A		(Provide	supportin
. Cyperus esculentus	35	Yes	FACW	- data in Remarks or on a s			
				Problematic Hydrop	hytic Vege	tation ¹ (Ex	plain)
				¹ Indicators of hydric soil a	and wetland	d hydrolog	gy must b
				present, unless disturbed			
				Definitions of Vegetation	Strata:		
				Tree – Woody plants 3 in.	(7.6 cm) or	more in o	diameter a
·				breast height (DBH), rega			
				Sapling/shrub - Woody p	ants less tl	nan 3 in. D	BH and
				greater than or equal to 3	8.28 ft (1 m) tall.	
0		·		Herb – All herbaceous (no	on-woody)	plants, reg	gardless o
1				size, and woody plants le	ss than 3.2	8 ft tall.	
2				Woody vines – All woody	vines great	er than 3.	28 ft in
	35	= Total Cov	er	height.			
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	Present? Y	′es _ 🖌 🛛 N	lo
	0						
				-			
·		·		-			
·		·		-			
·	0	= Total Cov	o.r.	-			
	0		ei				

SOIL

Profile Des Depth	cription: (Describe 1 Matrix	o the	depth needed to Redox			e indicato	r or confirm the a	bsence of indicators.)
		0/				1 ?	Tautuma	Demerica
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹	Loc ²	Texture	Remarks
0 - 10	10YR 2/2	95	10YR 4/6	5	C	M/PL	Loam	
		·		·				
				·				
				-				
		·						
¹ Type: C = 0	Concentration, D = l	Deplet	ion, RM = Reduce	d Ma	atrix, MS	= Masked	l Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso			Polyvalue B	elow	Surface ((S8) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark S					
	istic (A3)		Loamy Muc					Coast Prairie Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gley	-			-	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted M	atrix	(F3)			Dark Surface (S7) (LRR K, L)
	d Below Dark Surfa	ice (A1						Polyvalue Below Surface (S8) (LRR K, L)
-	ark Surface (A12)		Depleted Da			7)		Thin Dark Surface (S9) (LRR K, L)
	/lucky Mineral (S1)		Redox Depr	essio	ons (F8)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy (Gleyed Matrix (S4)							Piedmont Floodplain Soils (F19) (MLRA 149B)
-	Redox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
-	d Matrix (S6)							Red Parent Material (F21)
	urface (S7) (LRR R, N		40P)					Very Shallow Dark Surface (TF12)
Dark St	111ace (37) (LKK K, IV		490)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	drolo	gy must	be prese	nt, unless disturbe	ed or problematic.
Restrictive	Layer (if observed):							
	Туре:	F	lard pan layer			Hydric S	Soil Present?	Yes 🟒 No
	Depth (inches):		10			-		
Remarks:			-					
Kernarks.								
Soil signific	antly disturbed as a	a resul	t of tilling.					

Hydrology Photos



Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet E	nergy Center		City/County: Cato, 0	Cayuga			Sampling Date:	2020-June-1	6
Applicant/Owner: N	lextEra				State: NY		Sampling Point:	W-BTF-02_UP	L-1
Investigator(s): Bren	nner Fahrenz, F	Ryan Snow		Sect	tion, Township, Ra	nge:			
Landform (hillslope, te	rrace, etc.):	Low Hill	Lo	ocal relief	(concave, convex	, none):	Convex	Slope	(%): 2 to 5
Subregion (LRR or MLR	RA): LRR I	R		Lat:	43.1360291464	Long:	-76.6392931746	Datum:	WGS84
Soil Map Unit Name:	Hilton loam,	3 to 8 percent sl	opes				NWI classific	cation: None	
Are climatic/hydrologic	c conditions or	the site typical	for this time of year	?	Yes 🟒 No _	(If no	o, explain in Rema	ırks.)	
Are Vegetation 🟒,	Soil 🟒,	or Hydrology	significantly distu	urbed?	Are "Normal (Circumst	tances" present?	Yes	No 🖌
Are Vegetation,	Soil,	or Hydrology	naturally problen	natic?	(If needed, ex	plain an	y answers in Rem	arks.)	

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

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No _
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures he	ere or in a separate report	;)	
Covertype is UPL. Area is upland, not all thr	ee wetland parameters ar	e present. ATV/ORV impacts observed. Ditches/drain til	es observed.
Circumstances are not normal due to agricu	Iltural activities.		

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of	one is required; check all t	<u>that apply)</u>	Secondary Indicators (minimum of two required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Aquati Marl D Hydrog	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3)	 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)
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial I Sparsely Vegetated Concave 	Recent Thin M magery (B7) Other	ice of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	_
(includes capillary fringe)			-
Describe Recorded Data (stream Remarks:	i gauge, monitoring well, a	erial photos, previous inspections), if	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-02_UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant	Indicator	Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species	That 0	(A)
	0			Are OBL, FACW, or FAC:		
				Total Number of Dominant Sp	ecies 1	(B)
				Across All Strata: Percent of Dominant Species		
				- Are OBL, FACW, or FAC:	0	(A/B
				Prevalence Index worksheet:		
				Total % Cover of:	Multiph	v Bv:
				- OBL species 0	x 1 =	بر _ ر
	0	= Total Cov	er	FACW species 0		0
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 10		30
	0			- FACU species 0		0
<u> </u>				- UPL species 80		400
3				- Column Totals 90		430 (B
l				Prevalence Index =	()	<u> 430 (E</u>
				Hydrophytic Vegetation Indica		2
				 1- Rapid Test for Hydrop 2 - Dominance Test is > 5 		1
	0	= Total Cov	er	3 - Prevalence Index is ≤		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adapt		o cupportir
. Zea mays	80	Yes	UPL	- data in Remarks or on a sepa		e supporti
2. Alopecurus pratensis	10	No	FAC	 Problematic Hydrophytic 		- xplain)
3				¹ Indicators of hydric soil and v	-	
4				present, unless disturbed or p	-	069 111030 0
5.				Definitions of Vegetation Stra		
5.				Tree – Woody plants 3 in. (7.6		diameter
7.				breast height (DBH), regardles		
3				Sapling/shrub – Woody plants	less than 3 in.	DBH and
).				greater than or equal to 3.28		
10.				Herb – All herbaceous (non-w	oody) plants, r	egardless o
11				size, and woody plants less th	an 3.28 ft tall.	
12.		· ·		Woody vines – All woody vine	s greater than	3.28 ft in
	90	= Total Cov	er	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Pres	ent? Yes	No 🟒
1.	0					
2.				-		
				-		
 4.		· ·		-		
.		= Total Cov	or	-		
	0		CI			

SOIL

Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Yes No	(inches) Color (moist) % Type' Loc' Texture Remark 0 - 10 10YR 3/4 100	rix. c Soils³: LRA 149B) R K, L, R)
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Histosol (A2) Thin Dark Surface (S9) (LRR K, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Bolew Dark Surface (A11) Depleted Matrix (F2) Sandy Mucky Mineral (F1) Depleted Matrix (F2) Sandy Mucky Mineral (F1) Depleted Matrix (F3) Sandy Mucky Mineral (F1) Redox Dark Surface (F7) Sandy Mucky Mineral (F1) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Meak Depressions (F8) Sandy Gleyed Matrix (S4) Meak Depressions (F8) Sandy Gleyed Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark	I'Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matr Hydric Soil Indicators: Indicators for Problematic Hydric Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histosol (A2) Thin Dark Surface (S9) (LRR K, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (F1) Thin Dark Surface (F6) Thin Dark Surface (F6) Thin Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S4) Redox Depressions (F8)	c Soils³: LRA 149B) R K, L, R)
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Redox Depresent, unless disturbed or problematic (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Yes	Hydric Soil Indicators: Indicators for Problematic Hydric Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MI Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LR Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12 Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F1 Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144)	c Soils³: LRA 149B) R K, L, R)
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Redox Depresent, unless disturbed or problematic (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Yes	Hydric Soil Indicators: Indicators for Problematic Hydric Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MI Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LR Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12 Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F1 Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144)	c Soils³: LRA 149B) R K, L, R)
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Orther (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): 10	Hydric Soil Indicators: Indicators for Problematic Hydric Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MI Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LR Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12 Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F1 Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144)	c Soils³: LRA 149B) R K, L, R)
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Orther (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): 10	Hydric Soil Indicators: Indicators for Problematic Hydric Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MI Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LR Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12 Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144)	c Soils³: LRA 149B) R K, L, R)
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Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Orther (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): 10	Hydric Soil Indicators: Indicators for Problematic Hydric Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MI Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LR Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12 Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144)	c Soils³: LRA 149B) R K, L, R)
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Orther (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): 10	Hydric Soil Indicators: Indicators for Problematic Hydric Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MI Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LR Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12 Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F1 Sandy Redox (S5) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144)	c Soils³: LRA 149B) R K, L, R)
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	Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144	
	Sandy Redox (SS)	
		4A, 143, 149B)
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Hard pan layer Depth (inches): 10	Strippod Matrix (SG)	F12)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Hard pan layer Depth (inches): 10	Dark Surface (C7) (LDD D MLDA 140D)	,
Restrictive Layer (if observed): Hard pan layer Hydric Soil Present? Yes No _✓ Depth (inches): 10	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Type: Hard pan layer Hydric Soil Present? YesNo Depth (inches): 10 10		
Depth (inches): 10	-	
	Remarks:	

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot South



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet Energy Center	City/County: Cato, Cayuga	Sampling Date: 2	020-June-17
Applicant/Owner: NextEra	State: NY	Sampling Point: W-E	BTF-03_PEM-1
Investigator(s): Brenner Fahrenz, Ryan Snow	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none):	Concave	Slope (%): 2 to 5
Subregion (LRR or MLRA): LRR R	Lat: 43.1375318914 Long:	-76.6484633333	Datum: WGS84
Soil Map Unit Name: Ontario loam, 14 to 20 per	cent slopes	NWI classificati	on: PEM
Are climatic/hydrologic conditions on the site typica	al for this time of year? Yes No _∠ (If no	, explain in Remarks.))
Are Vegetation 🟒, Soil 🟒, or Hydrology		stances" present?	Yes No 🟒
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain a	ny answers in Remark	s.)

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

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-BTF-03
agricultural activities. Drought.	nree wetiang parameters ar	re present. Ditches/drain tiles observed. Circumsta	ances are not normal due to

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is rea	uired; check all tha	at apply)	Secondary Indicators (minimum of two required)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) 	Aquatic F Marl Dep Hydrogei		 ✓ 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)
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (E Sparsely Vegetated Concave Surface (E 	— Recent lr — Thin Muc 7) — Other (Ex	e of Reduced Iron (C4) ron Reduction in Tilled Soils (C6) ck Surface (C7) kplain in Remarks)	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present? Yes _	No 🟒	Depth (inches):	
Water Table Present? Yes _	No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes _	No 🟒	Depth (inches):	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Aerial photography depicts a darker signature (i.e. potential depression or relic scar) at this location, which suggests the potential for this area to be a wetland. Historical area imagery show this area was previously forested, then cleared for crop land.

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-03_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	% Cover	Dominant Species?	Indicator Status	Dominance Test work Number of Dominant Are OBL, FACW, or FAC	Species That	2	(A)
1 2	0			Total Number of Dom Across All Strata:		4	(B)
3 4				Percent of Dominant S Are OBL, FACW, or FAC		50	(A/B)
5		<u> </u>		Prevalence Index wor	ksheet:		
5		. <u> </u>		Total % Cove	<u>r of:</u>	<u>Multiply</u>	<u>By:</u>
7		Tatal Ca		OBL species	15	x 1 =	15
	0	= Total Cov	er	FACW species	25	x 2 =	50
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
l	0	. <u> </u>		FACU species	5	x 4 =	20
2		. <u> </u>		UPL species	20	x 5 =	100
3		. <u> </u>		Column Totals	65	(A)	185 (B)
4				Prevalence I	ndex = B/A =	2.8	
				Hydrophytic Vegetatio			
				1- Rapid Test for		agetation	
7				2 - Dominance Te		egetation	I
	0	= Total Cov	er	2 = Dominance in			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica		(Provide	supporting
1. <i>Zea mays</i>	20	Yes	UPL	data in Remarks or on		-	supporting
2. Lythrum salicaria	15	Yes	OBL	Problematic Hyd			(nlain)
3. <i>Solidago gigantea</i>	15	Yes	FACW	¹ Indicators of hydric s			•
4. Phragmites australis	10	No	FACW	present, unless distur		-	6)
5.				Definitions of Vegetati			
5.				Tree – Woody plants 3		more in	diameter a
7.				breast height (DBH), r			
3.		. <u> </u>		Sapling/shrub - Wood	y plants less tl	nan 3 in. I	OBH and
). 				greater than or equal	to 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11		·		size, and woody plant	s less than 3.2	8 ft tall.	
12.		·		Woody vines - All woo	ody vines great	er than 3	.28 ft in
	60	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetati	on Present?	′es N	lo
1. Vitis aestivalis	5	Yes	FACU				
2. Lythrum salicaria	0	No	OBL				
3. Phragmites australis	0	No	FACW				
4.	0	INU	FACIV				
	5	= Total Cov	er				

Active agricultural field.

SOIL

Sampling Point: W-BTF-03_PEM-1

	ndicators.)
0 - 12 2.5YR 3/3 90 2.5YR 4/6 10 C M Rocky Loam Image: Construction of the second se	Dementio
Image: Solution of the second seco	Remarks
Hydric Soil Indicators: Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Stratified Layers (A5) Depleted Matrix (F3) Dark Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin I Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-f Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedn Sandy Redox (S5) Stripped Matrix (S4) Very S Dark Surface (S7) (LRR R, MLRA 149B) Other Very S Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or proble Other Restrictive Layer (if observed): 12 Hydric Soil Present? Depth (inches): 12 Hydric Soil Present? Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscure Depth obscure	
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	Muck (A10) (LRR K, L, MLRA 149B)
	: Prairie Redox (A16) (LRR K, L, R)
	Mucky Peat or Peat (S3) (LRR K, L, R)
	Surface (S7) (LRR K, L)
	alue Below Surface (S8) (LRR K, L)
	Dark Surface (S9) (LRR K, L)
Sandy Gleyed Matrix (S4) Piedn Mesic Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or proble Restrictive Layer (if observed): Type: Hard pan layer Depth (inches): 12 Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscur	Manganese Masses (F12) (LRR K, L, R)
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Sandy Redox (S5) Red P Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or proble Restrictive Layer (if observed): Type: Hard pan layer Depth (inches): 12 Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscur	Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or proble Restrictive Layer (if observed): Type: Hard pan layer Depth (inches): 12 Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscur	Parent Material (F21)
Dark Surface (S7) (LRR R, MLRA 149B)Other Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or proble Restrictive Layer (if observed): Type:Hard pan layerHydric Soil Present? Depth (inches): 12 Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscur	Shallow Dark Surface (TF12)
Restrictive Layer (if observed): Type: Hard pan layer Depth (inches): 12 Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscur	r (Explain in Remarks)
Type: Hard pan layer Hydric Soil Present? Depth (inches): 12 Present? Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscur	ematic.
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Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscu	Yes 🟒 No
Remarks: Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscu	
Soil significantly disturbed as a result of tilling. Soil disturbed, although not significantly enough to obscu	

Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet E	nergy Center		City/County: Cat	to, Cayuga			Sampling Date:	2020-June-17	
Applicant/Owner: N	extEra				State: NY		Sampling Point: \	W-BTF-03_UPL-1	
Investigator(s): Bren	ner Fahrenz, l	Ryan Snow		Sec	tion, Township,	Range:			
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relie	f (concave, conv	ex, none):	Convex	Slope (%)	: 1 to 10
Subregion (LRR or MLF	RA): LRR	२		Lat	43.137421292	4 Long:	-76.6481853938	Datum: V	VGS84
Soil Map Unit Name:	Ontario loan	n, 14 to 20 perce	ent slopes				NWI classific	ation: None	
Are climatic/hydrologic	c conditions or	n the site typical	for this time of ye	ear?	Yes No	_🖌 (lf no	, explain in Remark	ks.)	
Are Vegetation 🟒,	Soil 🟒,	or Hydrology	significantly di	listurbed?	Are "Norma	al Circums	tances" present?	Yes N	∘_∕_
Are Vegetation,	Soil,	or Hydrology	naturally prob	olematic?	(If needed,	explain ar	y answers in Rema	arks.)	

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

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

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

Circumstances are not normal due to mowing of vegetation. Drought.

HYDROLOGY

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

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-03_UPL-1

<u>rree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute	Dominant	Indicator	Dominance Test work			
		Species?	Status	Number of Dominant Are OBL, FACW, or FA	•	0	(A)
		·		Total Number of Dom		1	(B)
				Across All Strata:			
				 Percent of Dominant Are OBL, FACW, or FA 		0	(A/B)
				Prevalence Index wor			
				- Total % Cove		Multiply	Bv:
				- OBL species	0	x 1 =	0
	0	= Total Cov	er	FACW species	0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
	0			- FACU species	0	x 4 =	0
				- UPL species	45	x 5 =	225
				- Column Totals	45	(A)	225 (B
					Index = B/A =		225 (0
				Hydrophytic Vegetatio			
				- 1- Rapid Test for		legetation	h
				- 2 - Dominance T		egetation	
	0	= Total Cov	er	3 - Prevalence In			
<u>erb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica		(Provide	sunnortin
. Zea mays	45	Yes	UPL	- data in Remarks or or			Supportin
·				Problematic Hyd	•		xplain)
				- ¹ Indicators of hydric s			
				present, unless distur			Sy mast s
				Definitions of Vegetat			
				Tree – Woody plants 3		more in	diameter
				breast height (DBH), r			
				Sapling/shrub - Wood	ly plants less tl	han 3 in. I	DBH and
				greater than or equal			
0.				- Herb – All herbaceous	(non-woody)	plants, re	gardless o
1		·		size, and woody plant	s less than 3.2	8 ft tall.	
		·		Woody vines - All woo	ody vines great	er than 3	.28 ft in
2		= Total Cov	er	height.			
Voody Vine Stratum (Plot size: <u>30 ft</u>)		lotal cov		Hydrophytic Vegetati	on Present?	/es N	No 🖌
-	0						
·		·		-			
		<u> </u>		-			
·		<u> </u>		-			
	0	= Total Cov	or	-			
	0	- 10tal COV	er				

SOIL

Sampling Point: W-BTF-03_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) % Type! Loc2 Texture Remarks 0 - 8 2.5YR 3/3 98 2.5YR 3/4 2 C M Rocky Loam
0 - 8 2.5YR 3/3 98 2.5YR 3/4 2 C M Rocky Loam
0 - 8 2.5YR 3/3 98 2.5YR 3/4 2 C M Rocky Loam
Image: Solution of the second seco
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :
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Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 const Prairie Redox (A16) (LRR K, L, R) Right Histic (A2)
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Plack Listic (A2) Loamy Mucley Minoral (E1) (LDD K L)
Didek Histe (15) 5 cm Mucky Peat or Peat (S3) (I RR K I R)
Hydrogen Sulfide (A/)
Stratified Lavers (A5) Depleted Matrix (F3) Dark Surface (S7) (LKK K, L)
Depleted Below Dark Surface (A11) Redox Dark Surface (E6)
Thick Dark Surface (A12) Depleted Dark Surface (E7) Thin Dark Surface (S9) (LRR K, L)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Gleved Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Redox (S5) Mesic Spodic (1A6) (MLRA 144A, 145, 149B)
Stringed Materia (F21)
Dark Surface (C7) (I DD D. MI DA 140D)
Other (Explain in Remarks)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed):
Type: Hard pan layer Hydric Soil Present? Yes No _∠
Depth (inches): 8
Remarks:
The criterion for hydric soil is met. Soil significantly disturbed as a result of tilling.

Soil Photos



Photo of Sample Plot East Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet Energy Center	City/County: Cato, Cayuga	Sampling Date: 20	020-June-17
Applicant/Owner: NextEra	State: NY	Sampling Point: W-E	BTF-04_PEM-1
Investigator(s): Brenner Fahrenz, Ryan Snow	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none	e): Concave	Slope (%): 2 to 5
Subregion (LRR or MLRA): LRR R	Lat: 43.138154139 Lon	g: -76.6471467675	Datum: WGS84
Soil Map Unit Name: Ontario loam, 14 to 20 per	rcent slopes	NWI classificati	on: PEM
Are climatic/hydrologic conditions on the site typic	:al for this time of year? Yes No _∠ (If r	io, explain in Remarks.)	
Are Vegetation 🟒 , Soil 🟒 , or Hydrology	significantly disturbed? Are "Normal Circun	nstances" present?	Yes No 🟒
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain	any answers in Remark	s.)

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

Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No _
Netland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-BTF-04
Remarks: (Explain alternative procedure	es here or in a separate rep	port)	
Covertype is PEM. Ditches/drain tiles ob	oserved. Circumstances are	not normal due to agricultural activities. Drought	conditions .
51		5 5	

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum o	f one is required; check all	Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) 	Water- Aquati Marl D Hydro Oxidiz	 ✓ 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) 		
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave 	Recen Thin M Imagery (B7) Other	nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) Iuck Surface (C7) (Explain in Remarks)	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No	
Saturation Present?	Yes 🟒 No	Depth (inches): 9		
(includes capillary fringe)			-	
Describe Recorded Data (strear	n gauge, monitoring well, a	erial photos, previous inspections), if	available:	

Remarks:

The criterion for wetland hydrology is met. Hydrology significantly altered by recent culvert/drainage work.

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-04_PEM-1

<u> Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant		Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That	2	(A)
·	0			Are OBL, FACW, or FAC:		
·				Total Number of Dominant Species	⁵ 2	(B)
				Across All Strata:		
				 Percent of Dominant Species That Are OBL, FACW, or FAC: 	100	(A/B)
				Prevalence Index worksheet:		
				- Total % Cover of:	Multiply	Bv:
				- OBL species 30	x 1 =	30
		= Total Cov	er	FACW species 65	x 2 =	130
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 0	x 3 =	0
	0			- FACU species 0	x 4 =	0
				- UPL species 5	x 5 =	25
				- Column Totals 100	(A)	185 (B)
·				Prevalence Index = B/A =		105 (B
				Hydrophytic Vegetation Indicators		
				1- Rapid Test for Hydrophytic		
				- 2 - Dominance Test is >50%	vegetation	
	0	= Total Cov	er	\checkmark 3 - Prevalence Index is $\leq 3.0^{1}$		
l <u>erb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptation	s1 (Provide	supportin
. Cyperus esculentus	60	Yes	FACW	- data in Remarks or on a separate		supportin
. Typha latifolia	20	Yes	OBL	 Problematic Hydrophytic Veg 		(plain)
. Lythrum salicaria	10	No	OBL	- ¹ Indicators of hydric soil and wetla		
. Phalaris arundinacea	5	No	FACW	present, unless disturbed or probl	-	5)
. Zea mays	5	No	UPL	Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm)	or more in o	diameter a
<i>.</i>				breast height (DBH), regardless of		
				Sapling/shrub – Woody plants less	than 3 in. D	OBH and
				greater than or equal to 3.28 ft (1)	n) tall.	
0				Herb – All herbaceous (non-woody) plants, reg	gardless o
1				size, and woody plants less than 3		
2.				Woody vines – All woody vines gre	ater than 3.	.28 ft in
	100	= Total Cov	er	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present?	Yes 🟒 N	lo
· · · · · · · · · · · · · · · · · · ·						
2.		. <u> </u>		-		
3.				-		
l.				-		
	0	= Total Cov	er	-		

SOIL

	cription: (Describe	to the (indicato	r or confirm the a	sence of indicators.)	
Depth	Matrix		Redox	k Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	F	Remarks
0 - 6	5YR 3/2	70	10YR 2/1	30			Clay Loar	I <u> </u>	Mixed
6 - 13	5YR 2.5/1	95	5YR 3/4	5	С	М	Clay Loai	ı	
				·					
				·					
¹ Type: C = C	Concentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² L	cation: PL = Pore Lining, M =	Matrix.
Hydric Soil	Indicators:							Indicators for Problematic H	ydric Soils ³ :
Histoso			Polyvalue Be	elow S	Surface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K,	L, MLRA 149B)
	oipedon (A2)		Thin Dark Si					Coast Prairie Redox (A16	
	istic (A3)		Loamy Mucl	-		(LRR K,	L)	5 cm Mucky Peat or Peat	
	en Sulfide (A4)		Loamy Gley					Dark Surface (S7) (LRR K,	
	d Layers (A5)		Depleted Ma					Polyvalue Below Surface	
	d Below Dark Surfa	ace (A1	/		• •			Thin Dark Surface (S9) (L	
	ark Surface (A12)		Depleted Da)		Iron-Manganese Masses	
-	lucky Mineral (S1)		Redox Depr	essior	าร (F8)			Piedmont Floodplain Soi	
-	Gleyed Matrix (S4)							Mesic Spodic (TA6) (MLR/	
Sandy F	Redox (S5)							Red Parent Material (F21	
Stripped	d Matrix (S6)							Very Shallow Dark Surfac	
Dark Su	rface (S7) (LRR R, N	ILRA 1	49B)					Other (Explain in Remark	
21	- C have a large the state of								
	of hydrophytic veg L ayer (if observed):		i and wetland nyc	irolog	y must b	e preser	it, uniess disturbe	i or problematic.	
nestreave	Type:		lard pan layer			Hydric	Soil Present?	Yes 🖌 No	
	Depth (inches):		13	-		ingune	Soli i resent:		
	Depth (inches).		15						
Remarks:									
Refusal due	e to coarse fragmer	nts. Soi	l significantly dist	urbec	l as a res	ult of till	ing.		

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet E	nergy Center		City/County: Cato	o, Cayuga			Sampling Date:	2020-June-17
Applicant/Owner: N	extEra				State: N	١Y	Sampling Point:	W-BTF-04_UPL-1
Investigator(s): Bren	ner Fahrenz,	Ryan Snow		Sec	tion, Townsh	ip, Range:		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave, co	onvex, none)	Convex	Slope (%): 2 to 5
Subregion (LRR or MLF	RA): LRR	ર		Lat:	43.1379358	491 Long	-76.646836204	Datum: WGS84
Soil Map Unit Name:	Ontario loar	n, 14 to 20 perce	ent loam				NWI classifie	cation:
Are climatic/hydrologic	conditions o	n the site typical	for this time of yea	ar?	Yes I	No 🟒 (If no	o, explain in Remar	ks.)
Are Vegetation 🟒,	Soil 🟒,	or Hydrology	significantly dis	sturbed?	Are "Nor	rmal Circum	stances" present?	Yes No 🟒
Are Vegetation,	Soil,	or Hydrology	naturally proble	ematic?	(If neede	ed, explain a	ny answers in Rem	iarks.)

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

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

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	one is required; check all t	Secondary Indicators (minimum of two required)	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) 	Aquati Marl D Hydrog	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3)	 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)
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In Sparsely Vegetated Concave S 	Recent Thin M nagery (B7) Other (nce of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6) Iuck Surface (C7) (Explain in Remarks)	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	_
(includes capillary fringe)			-
Remarks:	gauge, monitoring well, a	erial photos, previous inspections), if	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-04_UPL-1

% Cover 0	Species?	Status	Number of Dominant	Snecies That		
0					0	(A)
			Are OBL, FACW, or FAC			
			Total Number of Domi	inant Species	1	(B)
			Across All Strata:			
					0	(A/B)
						_
						•
	= Total Cov	er				0
	Total Cov	-		-	x 2 =	0
0			FAC species	0	x 3 =	0
			FACU species	10	x 4 =	40
			UPL species	65	x 5 =	325
			Column Totals	75	(A)	365 (B)
	·		Prevalence I	ndex = B/A =	4.9	_
			Hydrophytic Vegetatio	n Indicators		
					egetatio	n
					egetatio	
0	= Total Cov	er				
					(Provide	supportin
65	Yes	UPL				supportin
10	No	FACU				volain)
			-		-	bgy must be
					natic	
			-			
						diameter a
				-	-	DBLLand
						рын ани
			-			ardloss o
	·					egal uless o
						2 28 ft in
			-	dy vines great		5.2010111
75	= Total Cov	er	·			
			Hydrophytic Vegetatio	on Present? Y	es	NO 🔽
0						
0 = Total Cover						
	0 0 0 0 65 10 0 65 10	0 = Total Cove 0 = Total Cove 0 = Total Cove 65 Yes 10 No 	0 = Total Cover	Percent of Dominant S Are OBL, FACW, or FAC Prevalence Index work Total % Cover0= Total Cover10NoFACUProblematic Hyd110NoFACUProblematic Hyd110NoFACUProblematic Hyd110NoFACUProblematic Hyd111NoFACUProblematic Hyd112Indicators of hydric sa present, unless disturfDefinitions of Vegetati113Image: Saling/Shrub - Wood greater than or equal Herb - All herbaceous size, and woody plants114Image: Saling Cover115Image: Saling Cover116Image: Saling Cov	Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Initial % Cover of: 0 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	Percent of Dominant Species That 0 Are OBL, FACW, or FAC: 0 Prevalence Index worksheet: 10 0 = Total Cover ACU species 0 ACU species 10 X 4 = UPL species ACU species 65 X 5 Column Totals ACU species 10 X 4 = 4.9 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) 10 No FACU Problematic Hydrophytic Vegetation 1 (E 10 No FACU Problematic Hydrophytic Vegetations1 (Provide data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation 1 (E 10 No FACU Problematic Hydrophytic Vegetat

SOIL

Profile Deso Depth	cription: (Describe Matrix	to the d	lepth needed to o Redox			indicato	r or confirm the a	absence of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 6	2.5YR 2.5/2	100					Loam	
6 - 12	10YR 4/3	85	10YR 5/6	15	С	М	Loam	Mixed
				·				
<u> </u>				·		·		
<u> </u>						·		
						·		
				· —		·		
				· —		·		
				· —		·		
				·		·		
				· —		·		
1Turn av C = C		Developti				Maaliad	Canal Craina 2	Leastic v. DL - Deve Living M - Metrix
	Concentration, D =	Depleti	on, RW = Reduce	u iviat	rix, ivis =	Maskeo	Sand Grains. 4	Location: PL = Pore Lining, M = Matrix.
Hydric Soil								Indicators for Problematic Hydric Soils ³ :
Histoso			Polyvalue Be					2 cm Muck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2) istic (A3)		Thin Dark Su					Coast Prairie Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye	-		LKK K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Ma					Dark Surface (S7) (LRR K, L)
	d Below Dark Surf	face (A11						Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted Da)		Thin Dark Surface (S9) (LRR K, L)
	/ucky Mineral (S1)		Redox Depr					Iron-Manganese Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)				. ,			Piedmont Floodplain Soils (F19) (MLRA 149B)
	Redox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
-	d Matrix (S6)							Red Parent Material (F21)
	urface (S7) (LRR R, I	MLRA 14	I9B)					Very Shallow Dark Surface (TF12)
								Other (Explain in Remarks)
		-	and wetland hyd	rolog	y must b	e preser	nt, unless disturb	ed or problematic.
Restrictive	Layer (if observed)):						
	Туре:	Ha	ard pan layer			Hydric	Soil Present?	Yes No 🟒
	Depth (inches):		12					
Remarks:								
Cailaianifia	م بر الم بر الم		af tilling					
Soli signino	antly disturbed as	aresuit	or tilling.					

Soil Photos



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Garnet E	nergy Center	Cit	y/County: Cato, Cay	yuga			Sampling Date:	: 2020-June-1	7
Applicant/Owner: N	lextEra				State: NY		Sampling Point:	W-BTF-05_PEN	<i>I</i> -1
Investigator(s): Bren	nner Fahrenz,	Ryan Snow		Sect	on, Township, Ra	ange:			
Landform (hillslope, te	errace, etc.):	Depression	Loca	al relief	(concave, convex	, none):	Concave	Slope (9	%): 1 to 3
Subregion (LRR or MLF	RA): LRR	२		Lat:	43.1379514615	Long:	-76.646837525	Datum:	WGS84
Soil Map Unit Name:	Ontario loar	n, 14 to 20 percent	slopes				NWI classifi	ication: PEM	
Are climatic/hydrologi	c conditions o	the site typical for	r this time of year?		Yes No	🖌 (lf no	explain in Remar	rks.)	
Are Vegetation,		, ,	significantly disturb				tances" present?		No 🟒
Are Vegetation,	Soil,	or Hydrology	naturally problema	tic?	(if needed, ex	cpiain ar	y answers in Rem	iarks.)	

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

Hydrophytic Vegetation Present?	Yes 🟒 No							
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No					
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-BTF-05					
Remarks: (Explain alternative procedure	es here or in a separate rep	prt)						
Covertype is PEM. Ditches/drain tiles ob	Covertype is PEM. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities. ATV/ORV impacts observed. Drought							
conditions .								

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Su 	Aquati Marl D Hydrog Oxidize Preser Recent Thin M agery (B7) Other of	Stained Leaves (B9) c Fauna (B13) gen Sulfide Odor (C1) ed Rhizospheres on Livin nce of Reduced Iron (C4) t Iron Reduction in Tilled luck Surface (C7) (Explain in Remarks)		 ✓ Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) ✓ Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ✓ Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes _∠_ No
Saturation Present?	Yes 🟒 No	Depth (inches):	10	_
(includes capillary fringe)				
Describe Recorded Data (stream g	auge, monitoring well, a	erial photos, previous ins	spections), if	available:

Sampling Point: W-BTF-05_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test work	Species That	1	(A)
	0			Are OBL, FACW, or FAC:			
				Total Number of Dom	inant Species	1	(B)
l				Across All Strata:			
				Percent of Dominant Are OBL, FACW, or FA		100	(A/B)
				Prevalence Index wor			
				Total % Cove		Multiply P	
,				- OBL species	<u>5</u>	<u>Multiply B</u> x 1 =	y. 5
	0	= Total Cov	er	FACW species	25	x1- x2=	50
apling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FAC species			
	0			- FACU species	0	x 3 =	0
					0	x 4 =	0
				UPL species	0	x 5 =	0
				Column Totals	30	(A)	55 (B)
·				Prevalence	Index = B/A =	1.8	
•				Hydrophytic Vegetatio	on Indicators:		
·				1- Rapid Test for	Hydrophytic V	egetation	
	0	= Total Cov	or	2 - Dominance T	est is >50%		
lerb Stratum (Plot size: <u>5 ft</u>)		- 10tal COV	CI	3 - Prevalence Ir	idex is $\leq 3.0^1$		
. Impatiens capensis	20	Yes	FACW	4 - Morphologica	al Adaptations ¹	(Provide s	upportin
	5	No	OBL	- data in Remarks or or	n a separate sh	eet)	
51				Problematic Hyd	drophytic Veget	ation ¹ (Exp	lain)
3. <u>Cyperus esculentus</u>	5	No	FACW	¹ Indicators of hydric s		, 0,	y must b
ł				present, unless distur	bed or probler	natic	
				Definitions of Vegetat			
				Tree – Woody plants 3			ameter a
·				breast height (DBH), r	-		
				Sapling/shrub – Wood			3H and
)				greater than or equal			
0				Herb – All herbaceous			ardless o
1				size, and woody plant			
2				Woody vines – All woo	ody vines great	er than 3.2	8 ft in
	30	= Total Cov	er	height.			
<u>Noody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetati	ion Present? Y	′es 🟒 No	
	0						
3.							
ł.							
	0	= Total Cov	er				

Profile Des	cription: (Describe	to the o				indicato	r or confirm the at	osence of indicators.)
Depth	Matrix		Redox	< Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 11	2.5YR 3/1	90	2.5YR 4/6	10	С	М	Silt Loam	
11 - 20	2.5YR 3/1	85	2.5YR 4/6	15	С	М	Loam	
	,			·				
				· —				
				· —				
				·				·
				·				
				· —				
¹ Type: C = 0	Concentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil			i					Indicators for Problematic Hydric Soils ³ :
Histoso			Polyvalue Br	elow	Surface (S	58) (I RR	R, MLRA 149B)	-
	pipedon (A2)		Thin Dark Su					2 cm Muck (A10) (LRR K, L, MLRA 149B)
	istic (A3)		Loamy Muck					Coast Prairie Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye	-		(_,	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Ma					Dark Surface (S7) (LRR K, L)
	d Below Dark Surfa	ace (A1						Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted Da)		Thin Dark Surface (S9) (LRR K, L)
	Aucky Mineral (S1)		Redox Depr					Iron-Manganese Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)							Piedmont Floodplain Soils (F19) (MLRA 149B)
-	Redox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
-	d Matrix (S6)							Red Parent Material (F21)
	urface (S7) (LRR R, N		40P)					Very Shallow Dark Surface (TF12)
Dark Su	(1111111111111111111111111111111111111	ILKA I	450)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	etatior	າ and wetland hyd	irolog	y must b	e preser	nt, unless disturbe	d or problematic.
Restrictive	Layer (if observed):	:						
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks:	<u> </u>							
Soil signific	antly disturbed as .	a resul	t of tilling. A positi	ive inc	dication o	of hydric	soil was observed	Γ.

Hydrology Photos





Photo of Sample Plot North



Photo of Sample Plot South

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet Energy Center		City/County:	Cato, Cayuga		Sampling Date: 2020-June-17			
Applicant/Owner: NextEra			State: NY			Sampling Point: W-BTF-05_UPL-1		
Investigator(s): Bren	iner Fahrenz, R	yan Snow	Sect	tion, Township, Ra	inge:			
Landform (hillslope, te	rrace, etc.):	Hillslope	Local relief	(concave, convex	, none):	Convex	Slope (%):	15 to 20
Subregion (LRR or MLR	RA): LRR F	ł	Lat:	43.1365365779	Long:	-76.6464166459	Datum: W	/GS84
Soil Map Unit Name:	Ontario Loan	n, 14 to 20 percent slopes				NWI classificat	ion: None	
Are climatic/hydrologic	conditions on	the site typical for this time	of year?	Yes No	🖊 (lf no,	explain in Remarks.	.)	
Are Vegetation 🟒,	Soil 🟒 ,	or Hydrology 🟒 significant	tly disturbed?	Are "Normal (Circums	tances" present?	Yes No	
Are Vegetation,	Soil,	or Hydrology naturally	problematic?	(If needed, ex	plain an	y answers in Remarl	ks.)	

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

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report)

Covertype is UPL. Area is upland, not all three wetland parameters are present. Circumstances are not normal due to agricultural activities. Drought conditions .

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	Secondary Indicators (minimum of two required)		
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water- Aquati Marl D Hydrog Oxidize	 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) 	
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave Si	Recent Thin M nagery (B7) Other	ice of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes No 🟒	Depth (inches):	-
(includes capillary fringe)			-
Describe Recorded Data (stream g	gauge, monitoring well, a	erial photos, previous inspections), if	available:

Sampling Point: W-BTF-05_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant	Indicator	Dominance Test worksheet:		
		Species?	Status	Are OBL, FACW, or FAC:	0	(A)
	0			_		
				Total Number of Dominant Species Across All Strata:	° 1	(B)
				Percent of Dominant Species That		
·		<u> </u>		- Are OBL, FACW, or FAC:	0	(A/B
·				Prevalence Index worksheet:		
·		<u> </u>		- <u>Total % Cover of:</u>	<u>Multiply</u>	<u>' By:</u>
				OBL species 0	x 1 =	0
	0	= Total Cov	er	FACW species 0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 0	x 3 =	0
	0	·		- FACU species 5	x 4 =	20
				UPL species 65	x 5 =	325
				- Column Totals 70	(A)	345 (B
·				Prevalence Index = B/A =	4.9	
				Hydrophytic Vegetation Indicators		·
·				1- Rapid Test for Hydrophytic		n
·				2 - Dominance Test is > 50%		
	0	= Total Cov	er	$3 - Prevalence Index is \leq 3.0^{1}$		
<u>lerb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptation		supportir
. Zea mays	65	Yes	UPL	- data in Remarks or on a separate		
. Poa pratensis	5	No	FACU	Problematic Hydrophytic Veg		xplain)
3				¹ Indicators of hydric soil and wetla	nd hydrolo	ogy must b
l				present, unless disturbed or probl		
j				Definitions of Vegetation Strata:		
				Tree – Woody plants 3 in. (7.6 cm)	or more in	diameter
				breast height (DBH), regardless of	height.	
3				Sapling/shrub – Woody plants less	than 3 in.	DBH and
).				greater than or equal to 3.28 ft (1)	n) tall.	
0				Herb – All herbaceous (non-woody		gardless o
1				size, and woody plants less than 3		
2.				Woody vines – All woody vines gre	ater than 3	8.28 ft in
		= Total Cov	er	height.		
<u>Voody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present?	Yes	No 🟒
	0					
<u>.</u>				-		
·				-		
 I.		<u> </u>		-		
··	0	= Total Cov	or	-		
	0		CI CI			

Depth	Matrix	to the de	epth needed to docul Redox Fea		ator or confirm the a	bsence of indicators.)
(inches)	Color (moist)	%	Color (moist) %	Type ¹ Loo	2 Texture	Remarks
0 - 9	7.5YR 4/3	100				
				· ·		
				· ·		
				·		
				· ·		
	-			· ·		
				· ·		
Гуре: С = С	oncentration, D =	Depletio	n, RM = Reduced Ma	trix, MS = Masl	ked Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
•	ndicators:					Indicators for Problematic Hydric Soils ³ :
Histosol	(A1) Dipedon (A2)		Polyvalue Below Thin Dark Surface			2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Hi	•		Loamy Mucky Mi			Coast Prairie Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleyed Ma			5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted Matrix	(F3)		Polyvalue Below Surface (S8) (LRR K, L)
•			Redox Dark Surfa		Thin Dark Surface (S9) (LRR K, L)	
	ark Surface (A12)		Depleted Dark Su			Iron-Manganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Redox Depressio	ns (F8)		Piedmont Floodplain Soils (F19) (MLRA 149B)
	ileyed 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	MLRA 149	9B)			Other (Explain in Remarks)
			and wetland hydrolog	gy must be pre	sent, unless disturbe	ed or problematic.
	.ayer (if observed) : Type:		ard pan layer	Hvr	Iric Soil Present?	Yes No 🯒
	Depth (inches):		9	i iye	inc son Fresent:	
emarks:	Depth (inches).		9			
lo positive	indication of hydr	ic soils w	as observed. Soil sig	nificantly distu	rbed as a result of til	ling.



Photo of Sample Plot West

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet Energy Center	City/County: Cato, Cayuga	Sampling Date: 20)20-June-17
Applicant/Owner: NextEra	State: NY	Sampling Point: W-B	BTF-06_PEM-1
Investigator(s): Brenner Fahrenz, Ryan Snow	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none	e): Concave	Slope (%): 1 to 3
Subregion (LRR or MLRA): LRR R	Lat: 43.137684505 Lon	g: -76.6447951519	Datum: WGS84
Soil Map Unit Name:	slopes	NWI classification	on: PEM
Are climatic/hydrologic conditions on the site typic	al for this time of year? Yes No 🟒 (If r	no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circun	nstances" present?	Yes No 🟒
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain a	any answers in Remarks	s.)

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

Hydrophytic Vegetation Present?	Yes 🟒 No							
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No					
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-BTF-06					
Remarks: (Explain alternative procedures here or in a separate report) Covertype is PEM. Area is wetland, all three wetland parameters are present. ATV/ORV impacts observed. Ditches/drain tiles observed.								
51			ain tiles observed.					
Circumstances are not normal due to a	agricultural activities. Drot	ugni conditions.						

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum o	of one is required; check all	Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) 	Water Aquat Marl I Hydro ⁄ Oxidiz	 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) 		
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Concav 	• •	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations:				
Surface Water Present? Water Table Present?	Yes No 🟒 Yes No 🟒	Depth (inches): Depth (inches):	Wetland Hydrology Present? Yes _∠_ No	
Saturation Present? (includes capillary fringe)	Yes 🟒 No	Depth (inches):	5	
Describe Recorded Data (strea	m gauge, monitoring well, a	aerial photos, previous inspections	s), if available:	
Remarks:				
The criterion for wetland hydro	ology is met.			

Sampling Point: W-BTF-06_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	itatus Number of Dominant Species That			(A)
1	0			Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata:			
2						3	(B)
3				Percent of Dominant S	pecies That		
4		. <u> </u>		Are OBL, FACW, or FAC		100	(A/B)
5		<u> </u>		Prevalence Index works	sheet:		
6				Total % Cover	of:	Multiply B	<u>y:</u>
7				OBL species	58	x 1 =	58
	0	= Total Cov	er	FACW species	30	x 2 =	60
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u>)				FAC species	5	x 3 =	15
1	0			FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3				Column Totals	93	(A)	133 (B)
4		. <u> </u>		Prevalence Ir	idex = B/A =	1.4	
5		. <u> </u>		Hydrophytic Vegetation	Indicators:		
5				1- Rapid Test for ⊦		egetation	
7				2 - Dominance Tes		6801011011	
	0	= Total Cov	er	3 - Prevalence Ind			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological		(Provide si	innorting
<i>1. Persicaria amphibia</i>	30	Yes	OBL	data in Remarks or on			apporting
2. <i>Typha angustifolia</i>	20	Yes	OBL	Problematic Hydr			lain)
3. <i>Solidago gigantea</i>	20	Yes	FACW	¹ Indicators of hydric so			
4. <i>Phalaris arundinacea</i>	10	No	FACW	present, unless disturb		, 0,	
5. <i>Symplocarpus foetidus</i>	8	No	OBL	Definitions of Vegetation			
5. <i>Eutrochium purpureum</i>	5	No	FAC	Tree – Woody plants 3 i	n. (7.6 cm) or	[.] more in di	ameter a
7.				breast height (DBH), re	gardless of h	eight.	
3.				Sapling/shrub - Woody	plants less t	han 3 in. DE	3H and
				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (non-woody)	plants, rega	ardless of
11				size, and woody plants			
12.		. <u> </u>		Woody vines – All wood	ly vines great	er than 3.2	8 ft in
	93	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetatio	n Present?	/es 🟒 No)
1	0						
2.		·		·			
				·			
3 4.				•			
	0	= Total Cov	er				
			C1				

Profile Des Depth	cription: (Describe Matrix	to the	depth needed to Redox			indicato	r or confirm the a	bsence of in	dicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	•	Remarks
0 - 8	2.5YR 3/2	80	2.5YR 3/6	20	<u> </u>	PL	Silt Loan		Rendrids
8 - 20	2.5YR 2.5/2	95	2.5YR 5/8	5	C	M	Clay Loar		
	2.511(2.5)2		2.511(5)(5					<u> </u>	
						<u> </u>			
				·					
				·					
									D
		Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² L		Pore Lining, M = Matrix.
Hydric Soil								Indicators	for Problematic Hydric Soils ³ :
Histoso			,		-		R, MLRA 149B)		1uck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark S					Coast l	Prairie Redox (A16) (LRR K, L, R)
	istic (A3) en Sulfide (A4)		Loamy Muc Loamy Gley			(LRR K, I	_)	5 cm N	lucky Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted M						urface (S7) (LRR K, L)
	d Below Dark Surfa	ace (A1							lue Below Surface (S8) (LRR K, L)
	ark Surface (A12)		Depleted Da)			ark Surface (S9) (LRR K, L)
	/ucky Mineral (S1)		Redox Depr			,			anganese Masses (F12) (LRR K, L, R)
-	Gleyed Matrix (S4)				- (-)				ont Floodplain Soils (F19) (MLRA 149B)
-	Redox (S5)								Spodic (TA6) (MLRA 144A, 145, 149B)
-	d Matrix (S6)								rrent Material (F21)
	irface (S7) (LRR R, N	ILRA 1	49B)						hallow Dark Surface (TF12)
			- ,					Other ((Explain in Remarks)
-	of hydrophytic veg		n and wetland hyd	drolog	y must b	e preser	it, unless disturbe	ed or probler	natic.
Restrictive	Layer (if observed):								
	Туре:		None	-		Hydric	Soil Present?	١	res No
	Depth (inches):								
Remarks:									
A positivo i	ndication of hydric	coil w	s observed						
A positive i	indication of figuric	SUII Wa	is observed.						

Soil Photos



Photo of Sample Plot North Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet Energy Center	City/County: Cato, Cayuga	Sampling Date: 2020-June-17
Applicant/Owner: NextEra	State: NY	Sampling Point: W-BTF-06_UPL-1
Investigator(s): Brenner Fahrenz, Ryan Snow	Section, Township, Range:	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none):	Convex Slope (%): 2 to 5
Subregion (LRR or MLRA): LRR R	Lat: 43.1377215112 Long:	-76.6448794497 Datum: WGS84
Soil Map Unit Name: Ontario loam, 8 to 15 pe	rcent slopes	NWI classification: None
Are climatic/hydrologic conditions on the site typ	vical for this time of year? Yes No _∠ (If no	explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal Circums	tances" present? Yes No 🟒
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (If needed, explain an	y answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report		
Covertype is UPL. Circumstances are not nor	mal due to agricultural ac	tivities. Drought conditions.	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of	one is required; check all	that apply)	Secondary Indicators (minimum of two required)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) 	Aquat Marl E Hydro	-Stained Leaves (B9) ic Fauna (B13) Jeposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3)	 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)
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave 	Recen Recen Thin M Imagery (B7) Other	nce of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) Iuck Surface (C7) (Explain in Remarks)	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes No 🟒	Depth (inches):	
Water Table Present?	Yes No 🟒	Depth (inches):	- Wetland Hydrology Present? Yes No∠
Saturation Present?	Yes No 🟒	Depth (inches):	-
(includes capillary fringe)			-
Describe Recorded Data (strean 	n gauge, monitoring well, a	erial photos, previous inspections), if	available:

Sampling Point: W-BTF-06_UPL-1

<u>Free Stratum</u> (Plot size: <u>30 ft</u>)	Absolute	Dominant	Indicator	Dominance Test worksh			
		Species?	Status	Number of Dominant S Are OBL, FACW, or FAC:		0	(A)
				Total Number of Domin		1	(B)
				Across All Strata:			
				 Percent of Dominant Sp Are OBL, FACW, or FAC: 		0	(A/B)
				Prevalence Index works			
·				- Total % Cover		Multiply	Bv:
·				- OBL species	0	x 1 =	0
	0	= Total Cov	er	FACW species	0	x 2 =	0
apling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
	0			- FACU species	0	x 4 =	0
				- UPL species	35	x 5 =	175
				- Column Totals	35	(A)	175 (B
				Prevalence In			175 (0
		<u> </u>		Hydrophytic Vegetation			
				- 1- Rapid Test for H		/egetation	h
				2 - Dominance Tes		egetation	1
	0	= Total Cov	er	3 - Prevalence Ind			
<u>erb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological		l (Provido	supportin
. Zea mays	35	Yes	UPL	- data in Remarks or on a			supportin
				Problematic Hydro			xplain)
				 Indicators of hydric soi 			
				present, unless disturbe		-	,gy mast s
				Definitions of Vegetatio			
				Tree – Woody plants 3 i		r more in	diameter a
				breast height (DBH), reg			
				Sapling/shrub - Woody	-	-	DBH and
				greater than or equal to			
				Herb – All herbaceous (gardless o
0				size, and woody plants	less than 3.2	8 ft tall.	
1				Woody vines - All wood	y vines great	ter than 3	8.28 ft in
2		= Total Cov	er	height.			
Voody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	n Present?	/es l	No 🖌
	0			_			
·				-			
		· ·		-			
·				-			
	0	= Total Cov	or	-			
	0		ei				

Depth	Matrix		Redox	Features	5		
(inches)	Color (moist)	%	Color (moist)	<u>% Ту</u>	pe ¹ Lo	2 ² Texture	Remarks
0 - 8	10YR 4/3	100					Compacted
		·					
	Concentration, D =	Depletio	on, RM = Reduced	Matrix, N	NS = Mas	ked Sand Grains. ² l	_ocation: PL = Pore Lining, M = Matrix.
Hydric Soil I							Indicators for Problematic Hydric Soils ³ :
Histosol						RR R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep Black Hi	oipedon (A2)		Thin Dark Sur Loamy Mucky				Coast Prairie Redox (A16) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gleye			к, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Mat		· _/		Dark Surface (S7) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A11) Redox Dark S	urface (F	6)		Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Dar				Iron-Manganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Redox Depre	ssions (F8	8)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	ileyed Matrix (S4)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
							Red Parent Material (F21)
Sandy R							
Stripped	d Matrix (S6)						Very Shallow Dark Surface (TF12)
Stripped		ILRA 14	9B)				
Stripped Dark Su	d Matrix (S6) rface (S7) (LRR R, N			ology mu	ust be pre	sent, unless disturb	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Stripped Dark Su ³Indicators	d Matrix (S6) rface (S7) (LRR R, N	etation		ology mu	ust be pre	sent, unless disturb	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Stripped Dark Su Indicators C Restrictive L	d Matrix (S6) rface (S7) (LRR R, M of hydrophytic veg	etation		ology mu		sent, unless disturb	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Stripped Dark Su Indicators Restrictive L	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed) :	etation	and wetland hydr	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
Stripped Dark Su PIndicators Restrictive L	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed): Type:	etation	and wetland hydr ard pan layer	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
Stripped Dark Su Pindicators - Restrictive I Remarks:	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed): Type: Depth (inches):	etation H	and wetland hydr ard pan layer 8	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
Stripped Dark Su 3Indicators - Restrictive I Remarks:	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed): Type:	etation H	and wetland hydr ard pan layer 8	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
Stripped Dark Su PIndicators & Restrictive I Remarks:	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed): Type: Depth (inches):	etation H	and wetland hydr ard pan layer 8	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
Stripped Dark Su Pindicators - Restrictive I Remarks:	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed): Type: Depth (inches):	etation H	and wetland hydr ard pan layer 8	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
Stripped Dark Su Pindicators - Restrictive I Remarks:	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed): Type: Depth (inches):	etation H	and wetland hydr ard pan layer 8	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
Stripped Dark Su 3Indicators - Restrictive I Remarks:	d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg .ayer (if observed): Type: Depth (inches):	etation H	and wetland hydr ard pan layer 8	ology mu			Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ed or problematic.
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Soil Photos



Photo of Sample Plot North Photo of Sample Plot South



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Garnet E	nergy Center	Ci	ty/County: Cato, Ca	ayuga			Sampling Date:	2020-June-17
Applicant/Owner: N	extEra				State: NY		Sampling Point:	W-BTF-07_PEM-1
Investigator(s): Bren	ner Fahrenz, F	Ryan Snow		Sec	tion, Township, R	ange:		
Landform (hillslope, te	rrace, etc.):	Marsh	Loc	cal relief	(concave, convex	k, none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLR	RA): LRR F	र		Lat:	43.1315953161	Long:	-76.6538745127	Datum: WGS84
Soil Map Unit Name:	Lamson mud	ky fine sandy loar	n				NWI classifi	cation: PEM
Are climatic/hydrologic	conditions or	the site typical fo	or this time of year?		Yes No _	🖌 (lf no,	explain in Remar	rks.)
Are Vegetation,	Soil,	or Hydrology	_ significantly distur	bed?	Are "Normal	Circums	tances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	_ naturally problem	atic?	(If needed, e	kplain ar	y answers in Rem	narks.)

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

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

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	e is required; check all the	<u>at apply)</u>		Secondary Indicators (minimum of two required)
Surface Water (A1) High Water Table (A2) _∕ Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Aquatic I Marl Dep Hydroge	ained Leaves (B9) Fauna (B13) posits (B15) In Sulfide Odor (C1) I Rhizospheres on Living	g Roots (C3)	 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)
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Su 	Recent Ir Thin Mu agery (B7) Other (E2	e of Reduced Iron (C4) ron Reduction in Tilled S ck Surface (C7) xplain in Remarks)	Soils (C6)	 Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		_
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches):	5	
(includes capillary fringe)				
Describe Recorded Data (stream ga	auge, monitoring well, aer	ial photos, previous ins	pections), if	available:

Sampling Point: W-BTF-07_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		Dominant Species?	Indicator Status	Dominance Test works Number of Dominant		-	
1. Fraxinus pennsylvanica	28	Yes	FACW	Are OBL, FACW, or FAC	:	3	(A)
2.			mew	Total Number of Domi Across All Strata:	nant Species	3	(B)
3 4				Percent of Dominant S Are OBL, FACW, or FAC		100	(A/B)
5				Prevalence Index work	sheet:		
6				Total % Cover	of:	Multiply	By:
7				- OBL species	40	x 1 =	40
	28	= Total Cov	er	FACW species	83	x 2 =	166
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	10	x 3 =	30
1	0	. <u> </u>		FACU species	0	x 4 =	0
2				- UPL species	0	x 5 =	0
3				Column Totals	133	(A)	236 (B)
4.					ndex = B/A =	1.8	200 (2)
5							
6				Hydrophytic Vegetatio		logotation	
7				2 - Dominance Te		egetatio	1
	0	= Total Cov	er	2 - Dominance re 3 - Prevalence Inc			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica		(Provide	supporting
1. <i>Onoclea sensibilis</i>	40	Yes	FACW	- data in Remarks or on			Supporting
2. <i>Typha angustifolia</i>	40	Yes	OBL	Problematic Hyd	•		xplain)
3. <i>Solidago gigantea</i>	15	No	FACW	¹ Indicators of hydric so			•
4. Eutrochium purpureum	10	No	FAC	present, unless distur			0,
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 tl	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			
12.				Woody vines – All woo	dy vines great	er than 3	.28 ft in
	105	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetation	on Present?	/es 🟒 I	No
1. Onoclea sensibilis	0	No	FACW				
2. Typha angustifolia	0	No	OBL	-			
3. <i>Solidago gigantea</i>	0	No	FACW	-			
4. Eutrochium purpureum	0	No	FAC	-			
	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).

	•	to the o	•			indicator	or confirm the a	bsence of ind	icators.)
Depth (inches)	Matrix	04	Redox			1002	Toytur		Domortic
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Textur		Remarks
0 - 10	10YR 2/2	95	10YR 3/4	5	C	M	Loam		
10 - 22	10YR 5/1	85	10YR 6/8	15			Sandy Lo	bam	
				·					
				·				<u> </u>	
		Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked S	and Grains. ² L		Pore Lining, M = Matrix.
Hydric Soil I								Indicators fo	or Problematic Hydric Soils³:
Histosol			Polyvalue B					2 cm Mu	uck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Thin Dark S					Coast Pr	rairie Redox (A16) (LRR K, L, R)
Black Hi			Loamy Muc	-		(LRR K, L)		5 cm Mu	ucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Gley					Dark Su	rface (S7) (LRR K, L)
	d Layers (A5)		Depleted M					Polyvalu	e Below Surface (S8) (LRR K, L)
	d Below Dark Surfa	ace (A1							rk Surface (S9) (LRR K, L)
	ark Surface (A12)		Depleted Da)			nganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Redox Depr	essior	าร (F8)				nt Floodplain Soils (F19) (MLRA 149B)
-	Gleyed Matrix (S4)								oodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	Redox (S5)								ent Material (F21)
	A Materia (CC)								allow Dark Surface (TF12)
Stripped	u Matrix (S6)								
	u Matrix (S6) Irface (S7) (LRR R, N	/LRA 1	49B)					-	
Dark Su	rface (S7) (LRR R, N							Other (E	xplain in Remarks)
Dark Su ³ Indicators	rface (S7) (LRR R, N of hydrophytic veg	etatior		irolog	y must b	e present	, unless disturbe	Other (E	xplain in Remarks)
Dark Su ³ Indicators	rface (S7) (LRR R, N	etatior		irolog	y must b			Other (E	xplain in Remarks) atic.
Dark Su ³ Indicators Restrictive I	rface (S7) (LRR R, N of hydrophytic veg	etatior		irolog	y must b		unless disturbe oil Present?	Other (E	xplain in Remarks)
Dark Su ³ Indicators Restrictive I	rface (S7) (LRR R, N of hydrophytic veg L ayer (if observed) :	etatior	n and wetland hyd	drolog	y must b			Other (E	xplain in Remarks) atic.
Dark Su ³ Indicators Restrictive I	rface (S7) (LRR R, N <u>of hydrophytic veg</u> L ayer (if observed) : Type:	etatior	n and wetland hyd	lrolog -	y must b			Other (E	xplain in Remarks) atic.
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