



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.



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

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TRC's Stream Inventory Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

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 typical for this time of year? Yes ☒ No ____ (If no, explain in Remarks.)
 Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ☒
 Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No ____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No ____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No ____	If yes, optional Wetland Site ID:	W-BTF-01
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No ____		
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is PEM. Area is wetland, all three wetland parameters are present. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities.			

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Surface Soil Cracks (B6)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> Drainage Patterns (B10)		
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)		<input type="checkbox"/> Moss Trim Lines (B16)		
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input type="checkbox"/> Crayfish Burrows (C8)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> Stunted or Stressed Plants (D1)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)		<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input checked="" type="checkbox"/> Microtopographic Relief (D4)		
			<input checked="" type="checkbox"/> FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes ____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No ____ Depth (inches): <u>3</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No ____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 					
Remarks: 					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	0			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				
1. _____	0			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	0	= Total Cover		
Herb Stratum (Plot size: <u>5 ft</u>)				
1. <i>Phalaris arundinacea</i>	75	Yes	FACW	
2. <i>Typha latifolia</i>	15	No	OBL	
3. <i>Glyceria maxima</i>	10	No	OBL	
4. <i>Solidago gigantea</i>	5	No	FACW	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	105	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	0			
2. _____				
3. _____				
4. _____				
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply By:
OBL species	25 x 1 = 25
FACW species	80 x 2 = 160
FAC species	0 x 3 = 0
FACU species	0 x 4 = 0
UPL species	0 x 5 = 0
Column Totals	105 (A) 185 (B)
Prevalence Index = B/A = 1.8	

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤ 3.0¹

____ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ____

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

SOIL

Sampling Point: W-BTF-01 PEM-1

[illegible]

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: 2020-June-16
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-01_PFO-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Swamp Local relief (concave, convex, none): Concave Slope (%): 0 to 1
 Subregion (LRR or MLRA): LRR R Lat: 43.1312262837 Long: -76.6440057142 Datum: WGS84
 Soil Map Unit Name: Niagara fine sandy loam NWI classification: PFO
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ____ (If no, explain in Remarks.)
 Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" 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 <input checked="" type="checkbox"/> No ____	
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No ____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No ____
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No ____	If yes, optional Wetland Site ID: W-BTF-01
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is PFO. Area is wetland, all three wetland parameters are present.		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Surface Soil Cracks (B6)		
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> Drainage Patterns (B10)		
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)		<input type="checkbox"/> Moss Trim Lines (B16)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input type="checkbox"/> Crayfish Burrows (C8)		
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> Stunted or Stressed Plants (D1)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)		<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Microtopographic Relief (D4)		
			<input checked="" type="checkbox"/> FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No ____ Depth (inches): <u>11</u> Saturation Present? Yes <input checked="" type="checkbox"/> No ____ Depth (inches): <u>9</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No ____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01_PFO-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Acer rubrum</i>	75	Yes	FAC
2. <i>Fraxinus pennsylvanica</i>	15	No	FACW
3. <i>Carpinus caroliniana</i>	5	No	FAC
4. <i>Ulmus americana</i>	5	No	FACW
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	100 = Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)			
1. <i>Lindera benzoin</i>	20	Yes	FACW
2. <i>Carpinus caroliniana</i>	5	Yes	FAC
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	25 = Total Cover		
Herb Stratum (Plot size: <u>5 ft</u>)			
1. <i>Symplocarpus foetidus</i>	75	Yes	OBL
2. <i>Persicaria hydropiperoides</i>	5	No	OBL
3. <i>Alliaria petiolata</i>	5	No	FACU
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
	85 = Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply By:
OBL species <u>80</u>	x 1 = <u>80</u>
FACW species <u>40</u>	x 2 = <u>80</u>
FAC species <u>85</u>	x 3 = <u>255</u>
FACU species <u>5</u>	x 4 = <u>20</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals <u>210</u>	(A) <u>435</u> (B)
Prevalence Index = B/A = <u>2.1</u>	

Hydrophytic Vegetation Indicators:

 1- Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤ 3.0¹

☒ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No

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

SOIL

Sampling Point: W-BTF-01_PFO-1

[illegible]

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: 2020-June-16
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-01_PFO-2
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2 to 5
 Subregion (LRR or MLRA): LRR R Lat: 43.1347491678 Long: -76.6422522181 Datum: WGS84
 Soil Map Unit Name: Appleton and Lyons soils, 0 to 3 percent slopes NWI classification: PFO
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ____ (If no, explain in Remarks.)
 Are Vegetation ____, Soil ____, or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" 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 <input checked="" type="checkbox"/> No ____	
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No ____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No ____
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No ____	If yes, optional Wetland Site ID: <u>W-BTF-01</u>
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is PFO. Area is wetland, all three wetland parameters are present. Ditches/drain tiles observed.		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Surface Soil Cracks (B6)		
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)		<input checked="" type="checkbox"/> Drainage Patterns (B10)		
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)		<input type="checkbox"/> Moss Trim Lines (B16)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input type="checkbox"/> Crayfish Burrows (C8)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input checked="" type="checkbox"/> Stunted or Stressed Plants (D1)		
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Thin Muck Surface (C7)		<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Microtopographic Relief (D4)		
			<input checked="" type="checkbox"/> FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No ____ Depth (inches): <u>6</u> Saturation Present? Yes <input checked="" type="checkbox"/> No ____ Depth (inches): <u>0</u> (includes capillary fringe)			Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No ____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Sampling Point: W-BTF-01_PFO-2

Tree Stratum (Plot size: 30 ft)				Dominance Test worksheet:			
	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant Species That Are OBL, FACW, or FAC:			
1. <i>Thuja occidentalis</i>	45	Yes	FACW	5			(A)
2. <i>Acer rubrum</i>	45	Yes	FAC	Total Number of Dominant Species Across All Strata:			6 (B)
3. <i>Fraxinus pennsylvanica</i>	5	No	FACW	Percent of Dominant Species That Are OBL, FACW, or FAC:			83.3 (A/B)
4.				Prevalence Index worksheet:			
5.				Total % Cover of:		Multiply By:	
6.				OBL species	80	x 1 =	80
7.				FACW species	70	x 2 =	140
	95	= Total Cover		FAC species	45	x 3 =	135
Sapling/Shrub Stratum (Plot size: 15 ft)				FACU species	15	x 4 =	60
1. <i>Lindera benzoin</i>	5	Yes	FACW	UPL species	0	x 5 =	0
2. <i>Cornus amomum</i>	5	Yes	FACW	Column Totals	210	(A)	415 (B)
3.				Prevalence Index = B/A = 2			
4.				Hydrophytic Vegetation Indicators:			
5.				1- Rapid Test for Hydrophytic Vegetation			
6.				2- Dominance Test is >50%			
7.				3- Prevalence Index is ≤ 3.0 ¹			
	10	= Total Cover		4- Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
Herb Stratum (Plot size: 5 ft)				Problematic Hydrophytic Vegetation ¹ (Explain)			
1. <i>Symplocarpus foetidus</i>	80	Yes	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
2. <i>Impatiens capensis</i>	10	No	FACW	Definitions of Vegetation Strata:			
3.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
4.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
5.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
6.				Woody vines – All woody vines greater than 3.28 ft in height.			
7.				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
8.							
9.							
10.							
11.							
12.							
	90	= Total Cover					
Woody Vine Stratum (Plot size: 30 ft)							
1. <i>Parthenocissus quinquefolia</i>	15	Yes	FACU				
2.							
3.							
4.							
	15	= Total Cover					
Remarks: (Include photo numbers here or on a separate sheet.)							

SOIL

Sampling Point: W-BTF-01_PFO-2

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Garnet Energy Center City/County: Cato, Cayuga Sampling Date: 2020-June-16
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-01_UPL-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Low Hill Local relief (concave, convex, none): Convex Slope (%): 1 to 3
 Subregion (LRR or MLRA): LRR R Lat: 43.1311324528 Long: -76.6441468424 Datum: WGS84
 Soil Map Unit Name: Niagara fine sandy loam NWI classification: None
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report) Covertypes 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 .		

HYDROLOGY

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

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01 UPL-1

Tree Stratum (Plot size: 30 ft)				Dominance Test worksheet:	
	Absolute % Cover	Dominant Species?	Indicator Status		
1. <i>Acer rubrum</i>	40	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	3 (A)
2. <i>Acer negundo</i>	8	No	FAC	Total Number of Dominant Species Across All Strata:	6 (B)
3. <i>Tilia americana</i>	8	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:	50 (A/B)
4.					
5.					
6.					
7.					
	56	= Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft)				Prevalence Index worksheet:	
	Absolute % Cover	Dominant Species?	Indicator Status	Total % Cover of:	Multiply By:
1. <i>Rhamnus cathartica</i>	10	Yes	FAC	OBL species	0 x 1 = 0
2.				FACW species	5 x 2 = 10
3.				FAC species	68 x 3 = 204
4.				FACU species	73 x 4 = 292
5.				UPL species	40 x 5 = 200
6.				Column Totals	186 (A) 706 (B)
7.				Prevalence Index = B/A = 3.8	
	10	= Total Cover			
Herb Stratum (Plot size: 5 ft)				Hydrophytic Vegetation Indicators:	
	Absolute % Cover	Dominant Species?	Indicator Status		
1. <i>Solidago canadensis</i>	30	Yes	FACU	1- Rapid Test for Hydrophytic Vegetation	
2. <i>Zea mays</i>	30	Yes	UPL	2 - Dominance Test is > 50%	
3. <i>Solidago altissima</i>	15	No	FACU	3 - Prevalence Index is ≤ 3.0 ¹	
4. <i>Asclepias syriaca</i>	10	No	UPL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. <i>Alliaria petiolata</i>	10	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)	
6. <i>Phalaris arundinacea</i>	5	No	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
7.					
8.					
9.					
10.					
11.					
12.					
	100	= Total Cover			
Woody Vine Stratum (Plot size: 30 ft)				Definitions of Vegetation Strata:	
	Absolute % Cover	Dominant Species?	Indicator Status		
1. <i>Toxicodendron radicans</i>	10	Yes	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
2. <i>Parthenocissus quinquefolia</i>	10	Yes	FACU	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
3.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
4.				Woody vines – All woody vines greater than 3.28 ft in height.	
	20	= Total Cover		Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

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

SOIL

Sampling Point: W-BTF-01 UPL-1

[illegible]

Soil Photos



Photo of Sample Plot
East



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-16
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-01_UPL-2
 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: 43.1344999493 Long: -76.6418479988 Datum: WGS84
 Soil Map Unit Name: Galen fine sandy loam, 2 to 6 percent slopes NWI classification: None
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ____ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" 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 <input checked="" type="checkbox"/> No ____	
Hydric Soil Present?	Yes ____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes ____ No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes ____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report) Covertypes 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.		

HYDROLOGY

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

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-01 UPL-2

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Acer rubrum</i>	20	Yes	FAC
2. <i>Liriodendron tulipifera</i>	20	Yes	FACU
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	40 = Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)			
1. <i>Liriodendron tulipifera</i>	15	Yes	FACU
2. <i>Fraxinus pennsylvanica</i>	5	Yes	FACW
3. <i>Rosa multiflora</i>	5	Yes	FACU
4. <i>Rubus idaeus</i>	5	Yes	FACU
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	30 = Total Cover		
Herb Stratum (Plot size: <u>5 ft</u>)			
1. <i>Zea mays</i>	50	Yes	UPL
2. <i>Pteridium aquilinum</i>	25	Yes	FACU
3. <i>Solidago canadensis</i>	10	No	FACU
4. <i>Rubus idaeus</i>	10	No	FACU
5. <i>Toxicodendron radicans</i>	10	No	FAC
6. <i>Impatiens capensis</i>	5	No	FACW
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
	110 = Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)			
1. <i>Parthenocissus quinquefolia</i>	10	Yes	FACU
2. <i>Vitis aestivalis</i>	5	Yes	FACU
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	15 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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:

Total % Cover of:	Multiply By:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>105</u>	x 4 = <u>420</u>
UPL species <u>50</u>	x 5 = <u>250</u>
Column Totals <u>195</u>	(A) <u>780</u> (B)
Prevalence Index = B/A = <u>4</u>	

Hydrophytic Vegetation Indicators:

____ 1- Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is > 50%

____ 3 - Prevalence Index is ≤ 3.0¹

____ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☒ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

Active agricultural field.

SOIL

Sampling Point: W-BTF-01 UPL-2

[illegible]

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: 2020-June-16
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-02_PEM-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1 to 10
 Subregion (LRR or MLRA): LRR R Lat: 43.1359796731 Long: -76.6395157233 Datum: WGS84
 Soil Map Unit Name: Hilton loam, 3 to 8 percent slopes NWI classification: PEM
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID:	W-BTF-02
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

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

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

Sampling Point: W-BTF-02 PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.		0		
2.				
3.				
4.				
5.				
6.				
7.				
		0 = Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				
1.		0		
2.				
3.				
4.				
5.				
6.				
7.				
		0 = Total Cover		
Herb Stratum (Plot size: <u>5 ft</u>)				
1.	<i>Cyperus esculentus</i>	35	Yes	FACW
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		35 = Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1.		0		
2.				
3.				
4.				
		0 = Total Cover		

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

Active agricultural field.

Dominance Test worksheet:			
Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)	
Total Number of Dominant Species Across All Strata:	1	(B)	
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)	
Prevalence Index worksheet:			
Total % Cover of:	Multiply By:		
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals	35	(A)	70 (B)
Prevalence Index = B/A =		2	
Hydrophytic Vegetation Indicators:			
<input checked="" type="checkbox"/> 1- Rapid Test for Hydrophytic Vegetation			
<input checked="" type="checkbox"/> 2 - Dominance Test is >50%			
<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹			
<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
Definitions of Vegetation Strata:			
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
Woody vines – All woody vines greater than 3.28 ft in height.			
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			

SOIL

Sampling Point: W-BTF-02 PEM-1

[illegible]

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 Energy Center City/County: Cato, Cayuga Sampling Date: 2020-June-16
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-02_UPL-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Low Hill Local relief (concave, convex, none): Convex Slope (%): 2 to 5
 Subregion (LRR or MLRA): LRR R Lat: 43.1360291464 Long: -76.6392931746 Datum: WGS84
 Soil Map Unit Name: Hilton loam, 3 to 8 percent slopes NWI classification: None
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is UPL. Area is upland, not all three wetland parameters are present. ATV/ORV impacts observed. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities.		

HYDROLOGY

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

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-02_UPL-1

Tree Stratum (Plot size: 30 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.		0		
2.				
3.				
4.				
5.				
6.				
7.				
		0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.		0		
2.				
3.				
4.				
5.				
6.				
7.				
		0	= Total Cover	

Herb Stratum (Plot size: 5 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Zea mays</i>	80	Yes	UPL
2.	<i>Alopecurus pratensis</i>	10	No	FAC
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		90	= Total Cover	

Woody Vine Stratum (Plot size: 30 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.		0		
2.				
3.				
4.				
		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply By:
OBL species	0 x 1 = 0
FACW species	0 x 2 = 0
FAC species	10 x 3 = 30
ACU species	0 x 4 = 0
UPL species	80 x 5 = 400
Column Totals	90 (A) 430 (B)

Prevalence Index = B/A = 4.8

Hydrophytic Vegetation Indicators:

1- Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is > 50%

3 - Prevalence Index is ≤ 3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No ☒

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

Active agricultural field.

SOIL

Sampling Point: W-BTF-02 UPL-1

[illegible]

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: 2020-June-17
 Applicant/Owner: NextEra State: NY Sampling Point: W-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 percent slopes NWI classification: PEM
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u> No ____	
Hydric Soil Present?	Yes <u>✓</u> No ____	Is the Sampled Area within a Wetland? Yes <u>✓</u> No ____
Wetland Hydrology Present?	Yes <u>✓</u> No ____	If yes, optional Wetland Site ID: W-BTF-03
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is PEM. Area is wetland, all three wetland parameters are present. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities. Drought.		

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> Surface Soil Cracks (B6)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)		<input type="checkbox"/> Moss Trim Lines (B16)		
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input type="checkbox"/> Crayfish Burrows (C8)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> Stunted or Stressed Plants (D1)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)		<input checked="" type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Microtopographic Relief (D4)		
			<input checked="" type="checkbox"/> FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes ____ No <u>✓</u> Depth (inches): _____ Water Table Present? Yes ____ No <u>✓</u> Depth (inches): _____ Saturation Present? Yes ____ No <u>✓</u> Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes <u>✓</u> No ____		
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>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	0			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				
1. _____	0			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	0	= Total Cover		
Herb Stratum (Plot size: <u>5 ft</u>)				
1. <i>Zea mays</i>	20	Yes	UPL	
2. <i>Lythrum salicaria</i>	15	Yes	OBL	
3. <i>Solidago gigantea</i>	15	Yes	FACW	
4. <i>Phragmites australis</i>	10	No	FACW	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	60	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. <i>Vitis aestivalis</i>	5	Yes	FACU	
2. <i>Lythrum salicaria</i>	0	No	OBL	
3. <i>Phragmites australis</i>	0	No	FACW	
4. _____				
	5	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	<u>15</u>	x 1 =	<u>15</u>
FACW species	<u>25</u>	x 2 =	<u>50</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>5</u>	x 4 =	<u>20</u>
UPL species	<u>20</u>	x 5 =	<u>100</u>
Column Totals	<u>65</u>	(A)	<u>185</u> (B)
Prevalence Index = B/A = <u>2.8</u>			

Hydrophytic Vegetation Indicators:

☐ 1- Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤ 3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

Active agricultural field.

SOIL

Sampling Point: W-BTF-03 PEM-1

[illegible]

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: 2020-June-17
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-03_UPL-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 1 to 10
 Subregion (LRR or MLRA): LRR R Lat: 43.1374212924 Long: -76.6481853938 Datum: WGS84
 Soil Map Unit Name: Ontario loam, 14 to 20 percent slopes NWI classification: None
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u>	
Hydric Soil Present?	Yes ____ No <u>✓</u>	Is the Sampled Area within a Wetland? Yes ____ No <u>✓</u>
Wetland Hydrology Present?	Yes ____ No <u>✓</u>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report) Covertypes 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: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)			
		<input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations:					
Surface Water Present?	Yes ____ No <u>✓</u>	Depth (inches): _____	Wetland Hydrology Present? Yes ____ No <u>✓</u>		
Water Table Present?	Yes ____ No <u>✓</u>	Depth (inches): _____			
Saturation Present?	Yes ____ No <u>✓</u>	Depth (inches): _____			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-03 UPL-1

Tree Stratum (Plot size: 30 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.		0		
2.				
3.				
4.				
5.				
6.				
7.				
		0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.		0		
2.				
3.				
4.				
5.				
6.				
7.				
		0	= Total Cover	
Herb Stratum (Plot size: 5 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Zea mays</i>	45	Yes	UPL
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		45	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.		0		
2.				
3.				
4.				
		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply By:	
OBL species	<u>0</u>	x 1 =	<u>0</u>
FACW species	<u>0</u>	x 2 =	<u>0</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>45</u>	x 5 =	<u>225</u>
Column Totals	<u>45</u>	(A)	<u>225</u> (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

 1- Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is > 50%

 3 - Prevalence Index is ≤ 3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No ✓

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

Active agricultural field.

SOIL

Sampling Point: W-BTF-03 UPL-1

[illegible]

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: 2020-June-17
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-04_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: 43.138154139 Long: -76.6471467675 Datum: WGS84
 Soil Map Unit Name: Ontario loam, 14 to 20 percent slopes NWI classification: PEM
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u> No ____	
Hydric Soil Present?	Yes <u>✓</u> No ____	Is the Sampled Area within a Wetland? Yes <u>✓</u> No ____
Wetland Hydrology Present?	Yes <u>✓</u> No ____	If yes, optional Wetland Site ID: <u>W-BTF-04</u>
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is PEM. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities. Drought conditions .		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)			
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)			
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations:					
Surface Water Present?	Yes ____ No <u>✓</u>	Depth (inches):			
Water Table Present?	Yes ____ No <u>✓</u>	Depth (inches):			
Saturation Present?	Yes <u>✓</u> No ____	Depth (inches):	<u>9</u>		
(includes capillary fringe)			Wetland Hydrology Present? Yes <u>✓</u> No ____		
Describe Recorded Data (stream gauge, monitoring well, aerial 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

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	0			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				
1. _____	0			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	0	= Total Cover		
Herb Stratum (Plot size: <u>5 ft</u>)				
1. <i>Cyperus esculentus</i>	60	Yes	FACW	
2. <i>Typha latifolia</i>	20	Yes	OBL	
3. <i>Lythrum salicaria</i>	10	No	OBL	
4. <i>Phalaris arundinacea</i>	5	No	FACW	
5. <i>Zea mays</i>	5	No	UPL	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	100	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply By:	
OBL species	30	x 1 = 30
FACW species	65	x 2 = 130
FAC species	0	x 3 = 0
FACU species	0	x 4 = 0
UPL species	5	x 5 = 25
Column Totals	100	(A) 185 (B)
Prevalence Index = B/A = 1.9		

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤ 3.0¹

____ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ____

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

Active agricultural field.

SOIL

Sampling Point: W-BTF-04 PEM-1

[illegible]

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: 2020-June-17
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-04_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: 43.1379358491 Long: -76.646836204 Datum: WGS84
 Soil Map Unit Name: Ontario loam, 14 to 20 percent loam NWI classification: _____
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓
 Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

HYDROLOGY

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

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-04 UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																									
1. _____	0			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)																																								
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	0	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%; text-align: left;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply By:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td style="text-align: center;">0</td><td>x 1 =</td><td></td><td style="text-align: center;">0</td></tr> <tr><td>FACW species</td><td style="text-align: center;">0</td><td>x 2 =</td><td></td><td style="text-align: center;">0</td></tr> <tr><td>FAC species</td><td style="text-align: center;">0</td><td>x 3 =</td><td></td><td style="text-align: center;">0</td></tr> <tr><td>FACU species</td><td style="text-align: center;">10</td><td>x 4 =</td><td></td><td style="text-align: center;">40</td></tr> <tr><td>UPL species</td><td style="text-align: center;">65</td><td>x 5 =</td><td></td><td style="text-align: center;">325</td></tr> <tr><td>Column Totals</td><td style="text-align: center;">75</td><td>(A)</td><td></td><td style="text-align: center;">365 (B)</td></tr> <tr><td colspan="4" style="text-align: right;">Prevalence Index = B/A =</td><td style="text-align: center;">4.9</td></tr> </tbody> </table>	Total % Cover of:		Multiply By:			OBL species	0	x 1 =		0	FACW species	0	x 2 =		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 Index = B/A =				4.9
Total % Cover of:		Multiply By:																																										
OBL species	0	x 1 =			0																																							
FACW species	0	x 2 =			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 Index = B/A =				4.9																																								
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																												
1. _____	0																																											
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	0	= Total Cover		Hydrophytic Vegetation Indicators: ____ 1- Rapid Test for Hydrophytic Vegetation ____ 2 - Dominance Test is > 50% ____ 3 - Prevalence Index is ≤ 3.0 ¹ ____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic																																								
Herb Stratum (Plot size: <u>5 ft</u>)																																												
1. <i>Zea mays</i>	65	Yes	UPL																																									
2. <i>Poa pratensis</i>	10	No	FACU																																									
3. _____																																												
4. _____																																												
5. _____																																												
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8. _____																																												
9. _____																																												
10. _____																																												
11. _____																																												
12. _____																																												
	75	= Total Cover		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																																								
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																												
1. _____	0																																											
2. _____																																												
3. _____																																												
4. _____																																												
	0	= Total Cover																																										

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

SOIL

Sampling Point: W-BTF-04_UPL-1

[illegible]

Soil Photos



Photo of Sample Plot
South



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-05_PEM-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1 to 3
 Subregion (LRR or MLRA): LRR R Lat: 43.1379514615 Long: -76.646837525 Datum: WGS84
 Soil Map Unit Name: Ontario loam, 14 to 20 percent slopes NWI classification: PEM
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u> No ____	
Hydric Soil Present?	Yes <u>✓</u> No ____	Is the Sampled Area within a Wetland? Yes <u>✓</u> No ____
Wetland Hydrology Present?	Yes <u>✓</u> No ____	If yes, optional Wetland Site ID: <u>W-BTF-05</u>
Remarks: (Explain alternative procedures here or in a separate report) Covertypes 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 one is required; check all that apply)			Secondary Indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)			
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)			
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)			
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations:					
Surface Water Present?	Yes ____ No <u>✓</u>	Depth (inches):			
Water Table Present?	Yes ____ No <u>✓</u>	Depth (inches):			
Saturation Present?	Yes <u>✓</u> No ____	Depth (inches):	10		
(includes capillary fringe)			Wetland Hydrology Present? Yes <u>✓</u> No ____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-05_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																	
1. _____	0			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																																																
2. _____																																																				
3. _____																																																				
4. _____																																																				
5. _____																																																				
6. _____																																																				
7. _____																																																				
	0	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 10%; text-align: center;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%; text-align: center;">Multiply By:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">5</td> <td></td> <td>x 1 =</td> <td style="text-align: center;">5</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">25</td> <td></td> <td>x 2 =</td> <td style="text-align: center;">50</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">0</td> <td></td> <td>x 3 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">0</td> <td></td> <td>x 4 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">0</td> <td></td> <td>x 5 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>Column Totals</td> <td style="text-align: center;">30</td> <td></td> <td>(A)</td> <td style="text-align: center;">55</td> <td>(B)</td> </tr> <tr> <td colspan="4" style="text-align: right;">Prevalence Index = B/A =</td> <td style="text-align: center;"><u>1.8</u></td> <td></td> </tr> </tbody> </table>		Total % Cover of:		Multiply By:			OBL species	5		x 1 =	5		FACW species	25		x 2 =	50		FAC species	0		x 3 =	0		FACU species	0		x 4 =	0		UPL species	0		x 5 =	0		Column Totals	30		(A)	55	(B)	Prevalence Index = B/A =				<u>1.8</u>	
	Total % Cover of:		Multiply By:																																																	
OBL species	5		x 1 =		5																																															
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UPL species	0		x 5 =		0																																															
Column Totals	30		(A)	55	(B)																																															
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1. _____	0																																																			
2. _____																																																				
3. _____																																																				
4. _____																																																				
5. _____																																																				
6. _____																																																				
7. _____																																																				
	0	= Total Cover		Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic																																																
1. <i>Impatiens capensis</i>	20	Yes	FACW																																																	
2. <i>Typha latifolia</i>	5	No	OBL																																																	
3. <i>Cyperus esculentus</i>	5	No	FACW																																																	
4. _____																																																				
5. _____																																																				
6. _____																																																				
7. _____																																																				
8. _____																																																				
9. _____																																																				
10. _____																																																				
11. _____																																																				
12. _____																																																				
	30	= Total Cover		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																																																
1. _____	0																																																			
2. _____																																																				
3. _____																																																				
4. _____																																																				
	0	= Total Cover																																																		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																																
1. _____	0																																																			
2. _____																																																				
3. _____																																																				
4. _____																																																				
	0	= Total Cover																																																		

Remarks: (Include photo numbers here or on a separate sheet.)
 Active agricultural field. Vegetation dead, likely by herbicide application .

SOIL

Sampling Point: W-BTF-05 PEM-1

[illegible]

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 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): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15 to 20
 Subregion (LRR or MLRA): LRR R Lat: 43.1365365779 Long: -76.6464166459 Datum: WGS84
 Soil Map Unit Name: Ontario Loam, 14 to 20 percent slopes NWI classification: None
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u>	Is the Sampled Area within a Wetland?	Yes ____ No <u>✓</u>
Hydric Soil Present?	Yes ____ No <u>✓</u>	If yes, optional Wetland Site ID: _____	
Wetland Hydrology Present?	Yes ____ No <u>✓</u>		
Remarks: (Explain alternative procedures here or in a separate report) Covertypes 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 one is required; check all that apply)			Secondary Indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)			
		<input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations:					
Surface Water Present?	Yes ____ No <u>✓</u>	Depth (inches): _____	Wetland Hydrology Present? Yes ____ No <u>✓</u>		
Water Table Present?	Yes ____ No <u>✓</u>	Depth (inches): _____			
Saturation Present?	Yes ____ No <u>✓</u>	Depth (inches): _____			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-05 UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
1. _____	0			Number of Dominant Species That Are OBL, FACW, or FAC:	0		(A)	
2. _____				Total Number of Dominant Species Across All Strata:	1		(B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	0		(A/B)	
4. _____				Prevalence Index worksheet:				
5. _____				Total % Cover of:		Multiply By:		
6. _____				OBL species	0	x 1 =	0	
7. _____				FACW species	0	x 2 =	0	
	0	= Total Cover			FAC species	0	x 3 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FACU species	5	x 4 =	20	
1. _____	0			UPL species	65	x 5 =	325	
2. _____				Column Totals	70	(A)	345 (B)	
3. _____				Prevalence Index = B/A = <u>4.9</u>				
4. _____				Hydrophytic Vegetation Indicators:				
5. _____				____ 1- Rapid Test for Hydrophytic Vegetation				
6. _____				____ 2 - Dominance Test is > 50%				
7. _____				____ 3 - Prevalence Index is ≤ 3.0 ¹				
	0	= Total Cover			____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
Herb Stratum (Plot size: <u>5 ft</u>)				____ Problematic Hydrophytic Vegetation ¹ (Explain)				
1. <i>Zea mays</i>	65	Yes	UPL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic				
2. <i>Poa pratensis</i>	5	No	FACU	Definitions of Vegetation Strata:				
3. _____				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
4. _____				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.				
5. _____				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.				
6. _____				Woody vines – All woody vines greater than 3.28 ft in height.				
7. _____				Hydrophytic Vegetation Present? Yes ____ No <u>✓</u>				
8. _____								
9. _____								
10. _____								
11. _____								
12. _____								
	70	= Total Cover						
Woody Vine Stratum (Plot size: <u>30 ft</u>)								
1. _____	0							
2. _____								
3. _____								
4. _____								
	0	= Total Cover						
Remarks: (Include photo numbers here or on a separate sheet.) Active agricultural field.								

SOIL

Sampling Point: W-BTF-05_UPL-1

[illegible]

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: 2020-June-17
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-06_PEM-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1 to 3
 Subregion (LRR or MLRA): LRR R Lat: 43.137684505 Long: -76.6447951519 Datum: WGS84
 Soil Map Unit Name: Hilton loam, 3 to 8 percent slopes NWI classification: PEM
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u> No ____	
Hydric Soil Present?	Yes <u>✓</u> No ____	Is the Sampled Area within a Wetland? Yes <u>✓</u> No ____
Wetland Hydrology Present?	Yes <u>✓</u> No ____	If yes, optional Wetland Site ID: <u>W-BTF-06</u>
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is PEM. Area is wetland, all three wetland parameters are present. ATV/ORV impacts observed. Ditches/drain tiles observed. Circumstances are not normal due to agricultural activities. Drought conditions .		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)			
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)			
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations:					
Surface Water Present?	Yes ____ No <u>✓</u>	Depth (inches):			
Water Table Present?	Yes ____ No <u>✓</u>	Depth (inches):			
Saturation Present?	Yes <u>✓</u> No ____	Depth (inches):	<u>6</u>		
(includes capillary fringe)			Wetland Hydrology Present? Yes <u>✓</u> No ____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: The criterion for wetland hydrology is met.					

Sampling Point: W-BTF-06 PEM-1

Tree Stratum (Plot size: 30 ft)			Absolute % Cover	Dominant Species?	Indicator Status
1.			0		
2.					
3.					
4.					
5.					
6.					
7.					
			0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			Absolute % Cover	Dominant Species?	Indicator Status
1.			0		
2.					
3.					
4.					
5.					
6.					
7.					
			0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Persicaria amphibia</i>		30	Yes	OBL
2.	<i>Typha angustifolia</i>		20	Yes	OBL
3.	<i>Solidago gigantea</i>		20	Yes	FACW
4.	<i>Phalaris arundinacea</i>		10	No	FACW
5.	<i>Symplocarpus foetidus</i>		8	No	OBL
6.	<i>Eutrochium purpureum</i>		5	No	FAC
7.					
8.					
9.					
10.					
11.					
12.					
			93	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			Absolute % Cover	Dominant Species?	Indicator Status
1.			0		
2.					
3.					
4.					
			0	= Total Cover	

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

Fallow field.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply By:
OBL species 58	x 1 = 58
FACW species 30	x 2 = 60
FAC species 5	x 3 = 15
FACU species 0	x 4 = 0
UPL species 0	x 5 = 0
Column Totals 93	(A) 133 (B)
Prevalence Index = B/A = 1.4	

Hydrophytic Vegetation Indicators:

☒ 1- Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤ 3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: W-BTF-06 PEM-1

[illegible]

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 percent slopes NWI classification: None
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u>	
Hydric Soil Present?	Yes ____ No <u>✓</u>	Is the Sampled Area within a Wetland? Yes ____ No <u>✓</u>
Wetland Hydrology Present?	Yes ____ No <u>✓</u>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report) Covertypes is UPL. Circumstances are not normal due to agricultural activities. Drought conditions.		

HYDROLOGY

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

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-06 UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																									
1. _____	0			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)																																								
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	0	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: left;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%; text-align: left;">Multiply By:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td style="text-align: center;">0</td><td>x 1 =</td><td></td><td style="text-align: center;">0</td></tr> <tr><td>FACW species</td><td style="text-align: center;">0</td><td>x 2 =</td><td></td><td style="text-align: center;">0</td></tr> <tr><td>FAC species</td><td style="text-align: center;">0</td><td>x 3 =</td><td></td><td style="text-align: center;">0</td></tr> <tr><td>FACU species</td><td style="text-align: center;">0</td><td>x 4 =</td><td></td><td style="text-align: center;">0</td></tr> <tr><td>UPL species</td><td style="text-align: center;">35</td><td>x 5 =</td><td></td><td style="text-align: center;">175</td></tr> <tr><td>Column Totals</td><td style="text-align: center;">35</td><td>(A)</td><td></td><td style="text-align: center;">175 (B)</td></tr> <tr><td colspan="5" style="text-align: right;">Prevalence Index = B/A = <u>5</u></td></tr> </tbody> </table>	Total % Cover of:		Multiply By:			OBL species	0	x 1 =		0	FACW species	0	x 2 =		0	FAC species	0	x 3 =		0	FACU species	0	x 4 =		0	UPL species	35	x 5 =		175	Column Totals	35	(A)		175 (B)	Prevalence Index = B/A = <u>5</u>				
Total % Cover of:		Multiply By:																																										
OBL species	0	x 1 =			0																																							
FACW species	0	x 2 =			0																																							
FAC species	0	x 3 =			0																																							
FACU species	0	x 4 =			0																																							
UPL species	35	x 5 =			175																																							
Column Totals	35	(A)		175 (B)																																								
Prevalence Index = B/A = <u>5</u>																																												
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																												
1. _____	0																																											
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	0	= Total Cover																																										
Herb Stratum (Plot size: <u>5 ft</u>)																																												
1. <i>Zea mays</i>	35	Yes	UPL																																									
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
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8. _____																																												
9. _____																																												
10. _____																																												
11. _____																																												
12. _____																																												
	35	= Total Cover																																										
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																												
1. _____	0																																											
2. _____																																												
3. _____																																												
4. _____																																												
	0	= Total Cover																																										

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

Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines – All woody vines greater than 3.28 ft in height.
Hydrophytic Vegetation Present? Yes ____ No ✓

SOIL

Sampling Point: W-BTF-06 UPL-1

[illegible]

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: 2020-June-17
 Applicant/Owner: NextEra State: NY Sampling Point: W-BTF-07_PEM-1
 Investigator(s): Brenner Fahrenz, Ryan Snow Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Marsh Local relief (concave, convex, none): Concave Slope (%): 0 to 1
 Subregion (LRR or MLRA): LRR R Lat: 43.1315953161 Long: -76.6538745127 Datum: WGS84
 Soil Map Unit Name: Lamson mucky fine sandy loam NWI classification: PEM
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)
 Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" 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 <u>✓</u> No ____	Is the Sampled Area within a Wetland?	Yes <u>✓</u> No ____
Hydric Soil Present?	Yes <u>✓</u> No ____	If yes, optional Wetland Site ID:	W-BTF-07
Wetland Hydrology Present?	Yes <u>✓</u> No ____		

Remarks: (Explain alternative procedures here or in a separate report)
 Covertypes is PEM. Area is wetland, all three wetland parameters are present. Drought conditions .

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present?	Yes ____ No <u>✓</u>	Depth (inches): _____
Water Table Present?	Yes ____ No <u>✓</u>	Depth (inches): _____
Saturation Present?	Yes <u>✓</u> No ____	Depth (inches): <u>5</u>
(includes capillary fringe)		
Wetland Hydrology Present? Yes <u>✓</u> No ____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-BTF-07_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)				Dominance Test worksheet:	
	Absolute % Cover	Dominant Species?	Indicator Status		
1. <i>Fraxinus pennsylvanica</i>	28	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:	3 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	3 (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	100 (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
5. _____	_____	_____	_____	Total % Cover of:	Multiply By:
6. _____	_____	_____	_____	OBL species	40 x 1 = 40
7. _____	_____	_____	_____	FACW species	83 x 2 = 166
	28 = Total Cover			FAC species	10 x 3 = 30
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FACU species	0 x 4 = 0
1. _____	0	_____	_____	UPL species	0 x 5 = 0
2. _____	_____	_____	_____	Column Totals	133 (A) 236 (B)
3. _____	_____	_____	_____	Prevalence Index = B/A =	1.8
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
5. _____	_____	_____	_____	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
6. _____	_____	_____	_____	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
7. _____	_____	_____	_____	<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹	
	0 = Total Cover			____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: <u>5 ft</u>)				____ Problematic Hydrophytic Vegetation ¹ (Explain)	
1. <i>Onoclea sensibilis</i>	40	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
2. <i>Typha angustifolia</i>	40	Yes	OBL	Definitions of Vegetation Strata:	
3. <i>Solidago gigantea</i>	15	No	FACW	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
4. <i>Eutrochium purpureum</i>	10	No	FAC	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
5. _____	_____	_____	_____	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
6. _____	_____	_____	_____	Woody vines – All woody vines greater than 3.28 ft in height.	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
	105 = Total Cover				
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. <i>Onoclea sensibilis</i>	0	No	FACW		
2. <i>Typha angustifolia</i>	0	No	OBL		
3. <i>Solidago gigantea</i>	0	No	FACW		
4. <i>Eutrochium purpureum</i>	0	No	FAC		
	0 = Total Cover				
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).					

SOIL

Sampling Point: W-BTF-07 PEM-1

[illegible]