













































SOIL Sampling Point: W14X / 2U@W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-6	7.5YR 2.5/1	100					Loamy/Clayey	
6-9	7.5YR 3/2	100					Loamy/Clayey	
9-12	10YR 6/3	85	10YR 8/8	15	C	M	Loamy/Clayey	Prominent redox concentrations

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pipe Lining, M=Matrix

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> MLRA 149B
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Striped Matrix (S6)	<input type="checkbox"/> Marl (F10) (LRR K, L)
<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)

<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142q2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142q2_051293.docx))

VEGETATION - Use scientific names of plants. Sampling Point: W14X / 2U@W

Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Pinus strobus</i>	80	Yes	FACU
2. <i>Fraxinus americana</i>	10	No	FACU
3. <i>Acer rubrum</i>	10	No	FAC
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Total % Cover of: 100 =Total Cover

**Shrub/Stratum (Plot size: 15 )**

1. <i>Fagus grandifolia</i>	15	Yes	FACU
2. <i>Ostrya virginiana</i>	5	Yes	FACU
3. <i>Quercus rubra</i>	5	Yes	FACU
4. <i>Acer rubrum</i>	5	Yes	FAC
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Total % Cover of: 30 =Total Cover

**Herb Stratum (Plot size: 5 )**

1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

Total % Cover: \_\_\_\_\_ =Total Cover

**Woody Vine Stratum (Plot size: 30 )**

1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

Total % Cover: \_\_\_\_\_ =Total Cover

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

**Dominance Test worksheet:**

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

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of: Multiply by:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	115	x 4 =	460
UPL species	0	x 5 =	0
Column Totals:	130	(A)	505 (B)

Prevalence Index = B/A = 3.88

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is >3.0

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

Problematic Hydrophytic Vegetation? (Explain)

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, and woody plants less than 3.28 ft tall.

**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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Cat City/County: Allegany County Sampling Date: 10-25-18

Applicant/Owner: Inverney State: NY Sampling Point: \_\_\_\_\_

Investigator(s): JM, MO Section, Township, Range: Town of Rushford

Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 1-3

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.40566 Long: -78.29386 Datum: WGS 1984

Soil Map Unit Name: Gretaer channery silt loam NWI classification: n/a

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"/>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: (Explain alternative procedures here or in a separate report.)

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<input type="checkbox"/> Primary Indicators (minimum of one is required; check all that apply)	<input type="checkbox"/> Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input 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  No

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

Remarks:















SOIL Sampling Point 1W@W15E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-18	10Y 5/1	85	10YR 6/8	15	C	M	Loamy/Clayey	Prominent redox concentrations	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pipe Lining, M=Matrix

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> MLRA 149B	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Striped Matrix (S6)	<input type="checkbox"/> Marl (F10) (LRR K, L)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Dark Surface (S7)		

Indicators of hydrophic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A	
Depth (inches):	
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No

Remarks: This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142q2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142q2_051293.docx))

VEGETATION - Use scientific names of plants. Sampling Point: 1W@W15E

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

Sampling/Shrub Stratum (Plot size: 15)

1.			
2.			
3.			
4.			
5.			
6.			
7.			
=Total Cover			

Herb Stratum (Plot size: 5)

1. <i>Juncus effusus</i>	30	Yes	OBL
2. <i>Scirpus atrovirens</i>	25	Yes	OBL
3. <i>Ranunculus acris</i>	20	Yes	FAC
4. <i>Carex</i> sp.	15	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
=Total Cover			

Woody Vine Stratum (Plot size: 30)

1.			
2.			
3.			
4.			
=Total Cover			

**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: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 55	x 1 = 55
FACW species 0	x 2 = 0
FACU species 0	x 4 = 0
UPL species 0	x 5 = 0
Column Totals: 90	(A) 160 (B)
Prevalence Index = B/A =	1.78

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Index is >50%

3 - Prevalence Index is >3.0

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

Problematic Hydrophytic Vegetation? (Explain)

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, and woody plants less than 3.28 ft tall.

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.)

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Cat City/County: Freedom, Cattaraugus County Sampling Date: 10-26-18

Applicant/Owner: Invenergy State: NY Sampling Point: 1W@W15E

Investigator(s): JM, MO Section, Township, Range: Town of Freedom

Landform (hillside, terrace, etc.): Bowl-shaped depression Local relief (concave, convex, none): Concave Slope %: 2-4

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.49341 Long: -78.41362 Datum: WGS 1984

Soil Map Unit Name: Napoli Silt 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: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No	

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

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<input checked="" 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"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquifers (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	

**Field Observations:**

Surface Water Present? Yes <input checked="" type="checkbox"/> No	Depth (inches): 3
Water Table Present? Yes <input checked="" type="checkbox"/> No	Depth (inches):
Saturation Present? Yes <input checked="" type="checkbox"/> No	Depth (inches):
(includes capillary fringe)	

Wetland Hydrology Present? Yes  No

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

Remarks:



Sampling Point: 1W@W15F

**SOIL**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-16	10Y 4/1	90	10YR 6/8	10	C	PL/M	Loamy/Clayey	Prominent redox concentrations
16-20	10Y 4/1	60	7.5YR 7/8	30	C	M	Loamy/Clayey	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, <sup>1</sup>Location, PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

___ Histosol (A1)	___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
___ Histic Epipedon (A2)	___ MLRA 149B)	___ Coast Prairie Redox (A16) (LRR K, L, R)
___ Black Histic (A3)	___ Thin Dark Surface (S9) (LRR R, MLRA 149B)	___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
___ Hydrogen Sulfide (A4)	___ High Chroma Sands (S11) (LRR K, L)	___ Polyvalue Below Surface (S8) (LRR K, L)
___ Stratified Layers (A5)	___ Loamy Mucky Mineral (F1) (LRR K, L)	___ Thin Dark Surface (S9) (LRR K, L)
___ Depleted Below Dark Surface (A11)	___ X Loamy Gleyed Matrix (F2)	___ Iron-Manganese Masses (F12) (LRR K, L, R)
___ Thick Dark Surface (A12)	___ Depleted Matrix (F3)	___ Piedmont Floodplain Soils (F19) (MLRA 149B)
___ Sandy Mucky Mineral (S1)	___ Redox Dark Surface (F6)	___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
___ Sandy Gleyed Matrix (S4)	___ Depleted Dark Surface (F7)	___ Red Parent Material (F21)
___ Sandy Redox (S5)	___ Redox Depressions (F8)	___ Very Shallow Dark Surface (F22)
___ Stripped Matrix (S6)	___ Marl (F10) (LRR K, L)	___ Other (Explain in Remarks)
___ Dark Surface (S7)		

<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b>	<b>Hydric Soil Present?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Type: N/A			
Depth (inches):			

Remarks:  
This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142q2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142q2_051293.docx))

Sampling Point: 1W@W15F

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
=Total Cover			
Shrub/Strub Stratum (Plot size: 15)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
=Total Cover			
Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Phalaris arundinacea</i>	20	Yes	FACW
2. <i>Scirpus cyperinus</i>	40	Yes	OBL
3. <i>Solidago rugosa</i>	15	No	FAC
4. <i>Oncoclea sensibilis</i>	15	No	FACW
5. <i>Juncus effusus</i>	10	No	OBL
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
=Total Cover			
Woody Vine Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
=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: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species	50	x 1 =	50
FACW species	35	x 2 =	70
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100	(A)	165
Prevalence Index = B/A =	_____	_____	<u>1.65</u>

**Hydrophytic Vegetation Indicators:**

\_\_\_ 1 - Rapid Test for Hydrophytic Vegetation

\_\_\_ X 2 - Dominance Test is >50%

\_\_\_ X 3 - Prevalence Index is ≥3.0

\_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>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, and, woody plants less than 3.28 ft tall.

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

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

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

**Hydrophytic Vegetation Present?** Yes  No

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

Sampling Point: 1W@W15F

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Alle-Cat City/County: Freedom, Cattaraugus County Sampling Date: 10-26-18

Applicant/Owner: Invernery State: NY Sampling Point: 1W@W15F

Investigator(s): JM, MO Section, Township, Range: Town of Freedom

Landform (hillside, terrace, etc.): Bowl-shaped depression Local relief (concave, convex, none): Concave Slope %: 2-5

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.49286 Long: -78.41493 Datum: WGS 1984

Soil Map Unit Name: Napoli Silt 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 <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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: (Explain alternative procedures here or in a separate report.)			

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>	<b>Secondary Indicators (minimum of two required)</b>
___ Primary Indicators (minimum of one is required; check all that apply)	___ Surface Soil Cracks (B6)
___ X Surface Water (A1)	___ Water-Stained Leaves (B9)
___ High Water Table (A2)	___ Aquatic Fauna (B13)
___ Saturation (A3)	___ Marl Deposits (B15)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)
___ Sediment Deposits (B2)	___ X Oxidized Rhizospheres on Living Roots (C3)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)
___ Sparsely Vegetated Concave Surface (B8)	___ X FAC-Neutral Test (D5)

<b>Field Observations:</b>	<b>Wetland Hydrology Present?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>2</u>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>    </u>
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>    </u>
___ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

SOIL

Sampling Point: 1U@W15G

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)
Table with columns: Depth (inches), Matrix, Redox Features, Color (moist), Type, Loc, Texture, Remarks.
Includes sections for Hydric Soil Indicators, Restrictive Layer (if observed), and Remarks.

VEGETATION - Use scientific names of plants.

Sampling Point: 1U@W15G

Table for Vegetation recording with columns: Tree/Stratum, Absolute % Cover, Dominant Species?, Indicator Status.
Includes sections for Dominance Test worksheet, Prevalence Index worksheet, and Hydrophytic Vegetation Indicators.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Wetland Determination Data Form containing sections for:
Project/Site, Applicant/Owner, Investigator(s), Landform, Subregion, Soil Map Unit Name, Prevalence Index, Hydrophytic Vegetation Indicators, Definitions of Vegetation Strata, Saplings/Shrub, Herb, Woody Vine Stratum, and Field Observations.







SOIL Sampling Point: 1U@WD

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup> Loc <sup>2</sup>		
0-16	10YR 3/2	100				Loamy/Clayey	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, <sup>1</sup>Location, PL=Pipe Lining, M=Matrix

**Hydric Soil Indicators:**

Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, MLRA 149B)

Histic Epipedon (A2)  MLRA 149B

Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)

Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)

Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)

Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)

Thick Dark Surface (A12)  Depleted Matrix (F3)

Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)

Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)

Sandy Redox (S5)  Redox Depressions (F8)

Stripped Matrix (S6)  Marl (F10) (LRR K, L)

Dark Surface (S7)  Other (Explain in Remarks)

<sup>2</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A

Depth (inches):                     

Hydric Soil Present? Yes    No   x  

Remarks:  
This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs142q2\_051293.docx)

VEGETATION – Use scientific names of plants. Sampling Point: 1U@WD

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Carex</i> spp.	30	Yes	FAC
2. <u>                    </u>			
3. <u>                    </u>			
4. <u>                    </u>			
5. <u>                    </u>			
6. <u>                    </u>			
7. <u>                    </u>			
=Total Cover			
30			
Shrub/Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Rosa multiflora</i>	15	Yes	FACU
2. <i>Rubus</i> spp.	10	Yes	FAC
3. <u>                    </u>			
4. <u>                    </u>			
5. <u>                    </u>			
6. <u>                    </u>			
7. <u>                    </u>			
=Total Cover			
25			
Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Solidago rugosa</i>	70	Yes	FAC
2. <i>Phalaris arundinacea</i>	15	No	FACW
3. <i>Ranunculus acris</i>	10	No	FAC
4. <u>                    </u>			
5. <u>                    </u>			
6. <u>                    </u>			
7. <u>                    </u>			
8. <u>                    </u>			
9. <u>                    </u>			
10. <u>                    </u>			
11. <u>                    </u>			
12. <u>                    </u>			
=Total Cover			
95			
Woody Vine Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>                    </u>			
2. <u>                    </u>			
3. <u>                    </u>			
4. <u>                    </u>			
=Total Cover			

**Dominance Test worksheet:**

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 15	x 2 = 30
FAC species 120	x 3 = 360
FACU species 15	x 4 = 60
UPL species 0	x 5 = 0
Column Totals: 150 (A)	450 (B)
Prevalence Index = B/A =	3.00

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≥3.0<sup>1</sup>

4 - Morphological Adaptations<sup>2</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>3</sup> (Explain)

<sup>1</sup>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, and woody plants less than 3.28 ft tall.

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

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

**Hydrophytic Vegetation Present?** Yes X No   

Remarks: (Include photo numbers here or on a separate sheet.)  
Macrophages throughout open water

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Alle-Cat Wind City/County: Centerville, Allegany county Sampling Date: 5/9/2018

Applicant/Owner: Invernery State: NY Sampling Point: 1U@WD

Investigator(s): JR, SZ, JM Section, Township, Range: Town of Centerville

Landform (hillside, terrace, etc.):                      Footslope                      Local relief (concave, convex, none) Concave Slope %: 0-10

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.48615942 Long: -78.25683299 Datum: WGS 1984

Soil Map Unit Name: Yorkshire channery silt loam NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No    (If no, explain in Remarks.)

Are Vegetation   , Soil   , or Hydrology    significantly disturbed? Are "Normal Circumstances" present? Yes X No   

Are Vegetation   , Soil   , or Hydrology    naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>x</u> No <u>  </u>	Is the Sampled Area within a Wetland?	Yes <u>  </u> No <u>x</u>
Hydric Soil Present?	Yes <u>  </u> No <u>x</u>		
Wetland Hydrology Present?	Yes <u>  </u> No <u>x</u>	If yes, optional Wetland Site ID:	<u>                    </u>

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

**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-Soaked 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"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Shallow Aquifers (D3)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Microtopographic Relief (D4)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> FAC-Neutral Test (D5)	

**Field Observations:**

Surface Water Present? Yes <u>  </u> No <u>x</u>	Depth (inches): <u>                    </u>
Water Table Present? Yes <u>  </u> No <u>x</u>	Depth (inches): <u>                    </u>
Saturation Present? Yes <u>  </u> No <u>x</u>	Depth (inches): <u>                    </u>
(Includes capillary fringe)	Wetland Hydrology Present? Yes <u>  </u> No <u>x</u>

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

Remarks:

**SOIL**

Sampling Point: 1W@WD

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-3	10YR 2/2						Mucky Loam/Clay	
3-8	10YR 3/2						Mucky Loam/Clay	
8-16	10Y 6/1	95	5yr 3/4	5	D		Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Plow Lining, M=Matrix.

**Hydric Soil Indicators:**

- \_\_\_ Histosol (A1)
- \_\_\_ Histic Epipedon (A2)
- \_\_\_ Black Histic (A3)
- \_\_\_ Hydrogen Sulphide (A4)
- \_\_\_ Stratified Layers (A5)
- \_\_\_ X Depleted Below Dark Surface (A11)
- \_\_\_ Thick Dark Surface (A12)
- \_\_\_ Sandy Mucky Mineral (S1)
- \_\_\_ Sandy Gleyed Matrix (S4)
- \_\_\_ Sandy Redox (S5)
- \_\_\_ Stripped Matrix (S6)
- \_\_\_ Dark Surface (S7)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- \_\_\_ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- \_\_\_ Coast Prairie Redox (A16) (LRR K, L, R)
- \_\_\_ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- \_\_\_ Polyvalue Below Surface (SB) (LRR K, L)
- \_\_\_ Thin Dark Surface (S9) (LRR K, L)
- \_\_\_ Iron-Manganese Masses (F12) (LRR K, L, R)
- \_\_\_ Piedmont Floodplain Soils (F19) (MLRA 149B)
- \_\_\_ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- \_\_\_ Red Parent Material (F21)
- \_\_\_ Very Shallow Dark Surface (F22)
- \_\_\_ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

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

Sampling Point: 1W@WD

**Tree Stratum** (Plot size: 30)

1.	Absolute % Cover	Dominant Species?	Indicator Status

**Herb Stratum** (Plot size: 5)

1.	<i>Oenothera sensibilis</i>	40	Yes	FACW
2.	<i>Type's Sp.</i>	25	Yes	OBL

**Woody Vine Stratum** (Plot size: 30)

1.				

**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: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species	25	x 1 =	25	
FACW species	40	x 2 =	80	
FAC species	0	x 3 =	0	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column Totals:	65	(A)	105	(B)
Prevalence Index = B/A =	1.62			

**Hydrophytic Vegetation Indicators:**

- \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is  $\geq 3.0^4$
- \_\_\_ 4 - Morphological Adaptations<sup>5</sup> (Provide supporting data in Remarks or on a separate sheet)
- \_\_\_ Problematic Hydrophytic Vegetation<sup>6</sup> (Explain)

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.

**Saplings/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.)  
Small white flower photo 5% :06

**WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region**

Project/Site: Alle-Cat Wind City/County: Centerville, Allegany county Sampling Date: 5/8/2018

Applicant/Owner: Inverness State: NY Sampling Point: 1W@WD

Investigator(s): JR, SZ, JM Section, Township, Range: Town of Centerville

Landform (hillside, terrace, etc.): \_\_\_\_\_ Footslope \_\_\_\_\_ Local relief (concave, convex, none): Concave Slope %: 0-10

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.486261 Long: -78.256818 Datum: WGS 1984

Soil Map Unit Name: Yorkshire channery silt 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 <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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

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

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Drainage Patterns (B10)
___ Saturation (A3)	___ Marl Deposits (B15)	___ Moss Trim Lines (B16)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	___ Dry-Season Water Table (C2)
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)	___ Crayfish Burrows (C8)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)	___ Saturation Visible on Aerial Imagery (C9)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)	___ Stunted or Stressed Plants (D1)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)	___ Geomorphic Position (D2)
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)	___ Shallow Aquifers (D3)
___ Sparsely Vegetated Concave Surface (B8)	___	___ Microtopographic Relief (D4)
		___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	_____
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	_____
Saturation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	_____

Wetland Hydrology Present? Yes  No

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

Remarks:

SOIL							Sampling Point: 1U@WDD			
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)			Matrix			Redox Features				
Color (moist)		%	Color (moist)		%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-6	10YR 3/4	100						Loamy/Clayey	Loose dry silt loam	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains							%Location; PL=Pipe Lining, M=Matrix			
<b>Hydric Soil Indicators:</b>				<b>Indicators for Problematic Hydric Soils:</b>						
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)			<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)						
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> MLRA 149B			<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)						
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)			<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)						
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)			<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)						
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)			<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)						
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)						
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)			<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)						
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)			<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)						
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)			<input type="checkbox"/> Red Parent Material (F21)						
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)			<input type="checkbox"/> Very Shallow Dark Surface (F22)						
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Marl (F10) (LRR K, L)			<input type="checkbox"/> Other (Explain in Remarks)						
<input type="checkbox"/> Dark Surface (S7)										
<sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
<b>Restrictive Layer (if observed):</b>										
Type:	Root									
Depth (inches):	6		<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>							
Remarks:										

VEGETATION - Use scientific names of plants.					Sampling Point: 1U@WDD					
Tree Stratum (Plot size: 30 )				Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1.	Acer saccharum	100	Yes	FacU	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)					
2.	Ostrya virginiana	5	No	FACU	Total Number of Dominant Species Across All Strata: 4 (B)					
3.					Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)					
4.					<b>Prevalence Index worksheet:</b>					
5.					Total % Cover of: Multiply by:					
6.					DBL species 0 x 1 = 0					
7.					FACW species 0 x 2 = 0					
					FAC species 10 x 3 = 30					
					FACU species 115 x 4 = 460					
					UPL species 0 x 5 = 0					
					Column Totals: 125 (A) 490 (B)					
					Prevalence Index = B/A = 3.92					
Sapling/Shrub Stratum (Plot size: 15 )				=Total Cover	<b>Hydrophytic Vegetation Indicators:</b>					
1.					<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation					
2.					<input type="checkbox"/> 2 - Dominance Test is >50%					
3.					<input type="checkbox"/> 3 - Prevalence Index is <3.0					
4.					<input type="checkbox"/> 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)					
5.					<input type="checkbox"/> Problematic Hydrophytic Vegetation? (Explain)					
6.					Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
7.					<b>Definitions of Vegetation Strata:</b>					
8.					<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.					
9.					<b>Saplings/shrub</b> - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.					
10.					<b>Herb</b> - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.					
11.					<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.					
12.										
					=Total Cover					
Woody Vine Stratum (Plot size: 30 )				=Total Cover	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
1.										
2.										
3.										
4.										
					=Total Cover					
Remarks: (Include photo numbers here or on a separate sheet.)										

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region										
Project/Site: Alle-Cat Wind		City/County: Centerville, Allegany			Sampling Date: 6/19/2018					
Applicant/Owner: Invenergy		State: NY			Sampling Point: 1U@WDD					
Investigator(s): RF, JM		Section, Township, Range: Centerville								
Landform (hillside, terrace, etc.): Hillslope		Local relief (concave, convex, none): concave		Slope %: 3-7						
Subregion (LRR or MLRA): LRR R, MLRA 140		Lat: 42.47649		Long: -78.2975		Datum: WGS 1984				
Soil Map Unit Name: Almond silt loam		NWI classification: n/a								
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)										
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>										
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic? (If needed, explain any answers in Remarks.)										
<b>SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.</b>										
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.)										
<b>HYDROLOGY</b>										
<b>Wetland Hydrology Indicators:</b>		<b>Primary Indicators (minimum of one is required; check all that apply)</b>					<b>Secondary Indicators (minimum of two required)</b>			
<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"/> Saturation Visible on Aerial Imagery (C9)						
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)			<input type="checkbox"/> Stunted or Stressed Plants (D1)						
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)			<input type="checkbox"/> Geomorphic Position (D2)						
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)			<input type="checkbox"/> Shallow Aquifers (D3)						
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Microtopographic Relief (D4)						
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				<input type="checkbox"/> FAC-Neutral Test (D5)						
<b>Field Observations:</b>		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): _____								
		<i>(includes capillary fringe)</i>								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Remarks:										





SOIL

Sampling Point: 1W@WE

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12	10YR 4/2	95	7.5YR 4/6	5	C		Loamy/Clayey	concretions

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, %Location: PL=Pipe Lining, M=Matrix.	
<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulphide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) <input type="checkbox"/> Coastal Prairie Redox (A16) (LRR K, L, R) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) <input type="checkbox"/> Polyvalve Below Surface (SB) (LRR K, L) <input type="checkbox"/> Thin Dark Surface (SB) (LRR K, L) <input type="checkbox"/> Loamy Mucky Mineral (F7) (LRR K, L) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Dark Surface (F8) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Redox Depressions (F22) <input type="checkbox"/> Marl (F10) (LRR K, L) <input type="checkbox"/> Other (Explain in Remarks)
<sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
<b>Restrictive Layer (if observed):</b>	
Type: _____	
Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="checked" type="checkbox"/> No _____
Remarks: This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRC's Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)	

VEGETATION - Use scientific names of plants.

Sampling Point: 1W@WE

Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
=Total Cover			
Shrub/Strat. (Plot size: 15 )			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
=Total Cover			
Herb Stratum (Plot size: 5 )			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
=Total Cover			
Woody Vine Stratum (Plot size: 30 )			
1.			
2.			
3.			
4.			
=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: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species: 100 x 1 = 100

FACW species: 15 x 2 = 30

FAC species: 5 x 3 = 15

Facu species: 2 x 4 = 8

UPL species: 0 x 5 = 0

Column Totals: 122 (A) 153 (B)

Prevalence Index = B/A = 1.25

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≥3.0

4 - Morphological Adaptations<sup>3</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

**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.

**Saplings/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.)  
Macrophages throughout open water

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Cat Wind City/County: Centerville, Allegany county Sampling Date: 5/8/2018

Applicant/Owner: Invenery State: NY Sampling Point: 1W@WE

Investigator(s): JR, SZ, JM Section, Township, Range: Town of Centerville

Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope %: 3-8

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.48360215 Long: -78.25829219 Datum: WGS 1984

Soil Map Unit Name: Napoli silt loam NWI classification: PEMPFO

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="checked" type="checkbox"/> No _____	Is the Sampled Area within a Wetland?	Yes <input checked="checked" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="checked" type="checkbox"/> No _____	Wetland Hydrology Present?	Yes <input checked="checked" type="checkbox"/> No _____

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

**HYDROLOGY**

**Wetland Hydrology Indicators:**

**Primary Indicators (minimum of one is required; check all that apply)**

Surface Water (A1)  Water-Soaked Leaves (B9)  Surface Soil Cracks (B6)

High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)

Saturation (A3)  Marl Deposits (B15)  Moss Trim Lines (B16)

Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Dry-Season Water Table (C2)

Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)

Drift Deposits (B3)  Presence of Reduced Iron (C4)  Stunted or Stressed Plants (D1)

Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)

Iron Deposits (B5)  Thin Muck Surface (C7)  Geomorphic Position (D2)

Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Shallow Aquifers (D3)

Sparsely Vegetated Concave Surface (B8)  FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Saturation Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No \_\_\_\_\_

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











SOIL Sampling Point 1W@WGG

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	10YR 3/2	100					Mucky Peat	
2-12	10YR 4/2	95	7.5YR 4/6	5	C	PL	Mucky Loam/Clay	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Location: PL=Poly Lining, M=Matrix.

Hydric Soil Indicators: Histosol (A1), Histic Epipedon (A2), Black Histic (A3), Hydrogen Sulphide (A4), Stratified Layers (A5), Depleted Below Dark Surface (A11), Thick Dark Surface (A12), Sandy Mucky Mineral (S1), Sandy Gleyed Matrix (S4), Sandy Redox (S5), Stripped Matrix (S6), Dark Surface (S7).

Indicators for Problematic Hydric Soils: 2 cm Muck (A10), Coast Prairie Redox (A16), 5 cm Mucky Peat or Peat (S3), Polyvalue Below Surface (S8), Thin Dark Surface (S9), Thin Dark Surface (S9), Loamy Mucky Mineral (F1), Loamy Gleyed Matrix (F2), Depleted Matrix (F3), Redox Dark Surface (F6), Depleted Dark Surface (F7), Redox Dark Surface (F8), Very Shallow Dark Surface (F22), Marl (F10), Other.

Restrictive Layer (if observed): Type: Root, Depth (inches): 12, Hydric Soil Present? Yes [x] No.

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 1W@WGG

Tree Stratum (Plot size: 30)

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

Sapling/Shrub Stratum (Plot size: 15)

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

Herb Stratum (Plot size: 5)

Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species?	Indicator Status
1. Carex lurida	10	No	OBL
2. Junco effusus	15	Yes	OBL
3. Schenoplectus tabernaemontani	25	Yes	OBL
4. Solidago gigantea	5	No	FACW
5. Galium palustre	5	No	FACW
6. Phalaris arundinacea	10	No	FACW
7. Impatiens capensis	5	No	FACW
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: 30)

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

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: 100.0% (A/B); Prevalence Index worksheet: OBL species 50 x 1 = 50; FACW species 25 x 2 = 50; FACU species 0 x 4 = 0; UPL species 0 x 5 = 0; Column Totals: 75 (A), 100 (B); Prevalence Index = B/A = 1.33.

Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation: X 2 - Dominance Test is >50% X 3 - Prevalence Index is >3.0 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation? (Explain)

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 [x] No

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

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Alle-Cat Wind City/County: Centerville, Allegany Sampling Date: 6/13/2018

Applicant/Owner: Invergency City/County: Centerville, Allegany State: NY Sampling Point: 1W@WGG

Investigator(s): JM Section, Township, Range: Centerville

Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): none Slope %: 1-3

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.4638 Long: -78.2854 Datum: WGS 1984

Soil Map Unit Name: Yorkshire channery silt loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [x] No (If no, explain in Remarks.)

Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes [x] No

Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

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

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

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply): Surface Water (A1), High Water Table (A2), Saturation (A3), Water Marks (B1), Sediment Deposits (B2), Drift Deposits (B3), Algal Mat or Crust (B4), Iron Deposits (B5), Inundation Visible on Aerial Imagery (B7), Sparsely Vegetated Concave Surface (B8). Secondary Indicators (minimum of two required): Surface Soil Cracks (B6), Drainage Patterns (B10), Moss Trim Lines (B16), Dry-Season Water Table (C2), Crayfish Burrows (C8), Saturation Visible on Aerial Imagery (C9), Stunted or Stressed Plants (D1), Geomorphic Position (D2), Shallow Aquifers (D3), Microtopographic Relief (D4), FAC-Neutral Test (D5).

Field Observations: Surface Water Present? Yes [ ] No [x] Depth (inches): Water Table Present? Yes [x] No [ ] Depth (inches): 10 Saturation Present? Yes [x] No [ ] Depth (inches): 5 Wetland Hydrology Present? Yes [x] No [ ] (Includes capillary fringe)

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

Remarks: Wetland surrounding a pond





**SOIL**

Sampling Point 1U@WHH

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (Inches)	Matrix			Redox Features			Texture	Remarks
	Color (moist)	%		Color (moist)	%	Type <sup>1</sup>		
0-12	10YR 4/4	98		5YR 4/6	2	C	M	Loamy/Clayey Concrete in dry loose soil

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pipe Lining, M=Matrix

**Hydric Soil Indicators:**  
 Histosol (A1)  
 Histic Epipedon (A2)  
 Black Histic (A3)  
 Hydrogen Sulphide (A4)  
 Stratified Layers (A5)  
 Depleted Below Dark Surface (A11)  
 Thick Dark Surface (A12)  
 Sandy Mucky Mineral (S1)  
 Sandy Gleyed Matrix (S4)  
 Sandy Redox (S5)  
 Striped Matrix (S6)  
 Dark Surface (S7)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**  
 2 cm Muck (A10) (LRR K, L, MLRA 149B)  
 Coast Prairie Redox (A16) (LRR K, L, R)  
 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  
 Thin Dark Surface (S9) (LRR K, L)  
 Iron-Manganese Masses (F12) (LRR K, L, R)  
 Piedmont Floodplain Soils (F19) (MLRA 149B)  
 Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  
 Red Parent Material (F21)  
 Very Shallow Dark Surface (F22)  
 Other (Explain in Remarks)

<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**  
 Type: n/a  
 Depth (inches): \_\_\_\_\_  
 Hydric Soil Present? Yes  No

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point 1U@WHH

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

=Total Cover

**Sapling/Shrub Stratum (Plot size: 15)**

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			

=Total Cover

**Herb Stratum (Plot size: 5)**

	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Ranunculus acris</i>	10	No	FAC
2. <i>Scirpus atrovirens</i>	10	No	OBL
3. <i>Plantago lanceolata</i>	20	Yes	FACU
4. <i>Galium palustre</i>	10	No	FACW
5. <i>Trifolium pratense</i>	35	Yes	FACU
6. <i>Taraxacum officinale</i>	10	No	FACU
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			

=Total Cover

**Woody Vine Stratum (Plot size: 30)**

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			

=Total Cover

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

**Dominance Test worksheet:**

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:	Product
OBL species	10	0
FACW species	10	20
FAC species	10	30
FACU species	65	260
UPL species	0	0
Column Totals:	95	320
Prevalence Index = B/A =		3.37

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is >3.0

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>2</sup> (Explain)

<sup>1</sup>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, and greater than or equal to 3.28 ft (1 m) tall.

**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

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Alle-Cat Wind City/County: Centerville, Allegheny Sampling Date: 8/13/2018

Applicant/Owner: Invenergy State: NY Sampling Point: 1U@WHH

Investigator(s): JR, JM Section, Township, Range: Centerville

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope %: 1-2

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.4614 Long: -78.2861 Datum: WGS 1984

Soil Map Unit Name: Dalton Silt loam NWI classification: N/A

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 type="checkbox"/> No <input checked="" type="checkbox"/>
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.)

**HYDROLOGY**

Wetland Hydrology 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"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)
	<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):	
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  No

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

Remarks:

SOIL

Sampling Point 1W8WHH

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Table with columns: Depth (inches), Matrix, Redox Features, Color (moist), Type, Loc, Texture, Remarks.

Hydric Soil Indicators and Indicators for Problematic Hydric Soils: Table with columns for various soil indicators and their corresponding MLRA codes.

Restrictive Layer (if observed): Type, Roots, Depth (inches), Hydric Soil Present? Yes x No

Remarks: (Empty field for notes)

VEGETATION – Use scientific names of plants.

Sampling Point 1W8WHH

Tree Stratum (Plot size: 30) Table with columns: Tree Stratum, Absolute % Cover, Dominant Species?, Indicator Status.

Herb Stratum (Plot size: 5) Table with columns: Herb Stratum, Absolute % Cover, Dominant Species?, Indicator Status.

Woody Vine Stratum (Plot size: 30) Table with columns: Woody Vine Stratum, Absolute % Cover, Dominant Species?, Indicator Status.

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

Dominance Test worksheet:

Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC; Species Across All Strata; Prevalence Index worksheet.

Hydrophytic Vegetation Indicators:

Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation; 2-Dominance Test is >50%; 3-Prevalence Index is <3.0; 4-Morphological Adaptations.

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 x No

Remarks: (Empty field for notes)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Alle-Cat Wind; City/County: Centerville, Allegheny; Applicant/Owner: Invergency; State: NY; Sampling Date: 6/13/2018; Investigator(s): JR, RF, JM; Section, Township, Range: Centerville; Landform: Bowl-shaped depression; Local relief: concave, convex, none; Concave: Slope %: 0; Subregion (LRR or MLRA): LRR R, MLRA 140; Lat: 42.4621; Long: -78.22855; Datum: WGS 1984; Soil Map Unit Name: Napoli silt loam; NWI classification: PEM; Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No; Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Are Vegetation, Soil, or Hydrology naturally problematic?

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes x No; Hydric Soil Present? Yes x No; Wetland Hydrology Present? Yes x No; Is the Sampled Area within a Wetland? Yes x No; Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply); Secondary Indicators (minimum of two required); Surface Water (A1); High Water Table (A2); Saturation (A3); Water Marks (B1); Sediment Deposits (B2); Drift Deposits (B3); Algal Mat or Crust (B4); Iron Deposits (B5); Inundation Visible on Aerial Imagery (B7); Sparsely Vegetated Concave Surface (B8); Waste-Stained Leaves (B9); Aquatic Fauna (B13); Marl Deposits (B15); Hydrogen Sulfide Odor (C1); Oxidized Rhizospheres on Living Roots (C3); Presence of Reduced Iron (C4); Recent Iron Reduction in Tilled Soils (C6); Thin Muck Surface (C7); Other (Explain in Remarks); Surface Soil Cracks (B6); Drainage Patterns (B10); Moss Trim Lines (B16); Dry-Season Water Table (C2); Crayfish Burrows (C8); Stunted or Stressed Plants (D1); Saturation Visible on Aerial Imagery (C9); Geomorphic Position (D2); Shallow Aquifers (D3); Microtopographic Relief (D4); FAC-Neutral Test (D5).

Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Wetland Hydrology Present? Yes x No

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

Remarks: (Empty field for notes)

SOIL Sampling Point: 1U@WI

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 4/3	100					Mucky Loam/Clay	

^Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ^Location: PL=Pow Lining, M=Matrix

**Hydric Soil Indicators:**  
 Histosol (A1) \_\_\_\_\_ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  
 Histic Epipedon (A2) \_\_\_\_\_ MLRA 149B)  
 Black Histic (A3) \_\_\_\_\_ Thin Dark Surface (S9) (LRR R, MLRA 149B)  
 Hydrogen Sulfide (A4) \_\_\_\_\_ High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L)  
 Stagnated Layers (A5) \_\_\_\_\_ Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)  
 Depleted Below Dark Surface (A11) \_\_\_\_\_ Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R)  
 Thick Dark Surface (A12) \_\_\_\_\_ Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B)  
 Sandy Mucky Mineral (S1) \_\_\_\_\_ Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  
 Sandy Gleyed Matrix (S4) \_\_\_\_\_ Depleted Dark Surface (F7) Red Parent Material (F21)  
 Sandy Redox (S5) \_\_\_\_\_ Redox Depressions (F8) Very Shallow Dark Surface (F22)  
 Stagnoped Matrix (S6) \_\_\_\_\_ Marl (F10) (LRR K, L) Other (Explain in Remarks)  
 Dark Surface (S7) \_\_\_\_\_

<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b>	
Type: N/A	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

VEGETATION - Use scientific names of plants. Sampling Point: 1U@WI

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

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

Herb Stratum (Plot size: 5 )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Solidago rugosa</i>	60	Yes	FAC
2. <i>Lonicera morrowii</i>	15	No	FACU
3. <i>Phalaris arundinacea</i>	10	No	FACU
4. <i>Ranunculus</i> sp.	5	No	FAC
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			
=Total Cover			
=____%			

Woody Vine Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
=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: 100.0% (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: OBL species 0 x 1 = 0  
 FACW species 10 x 2 = 20  
 FACU species 15 x 4 = 60  
 UPL species 0 x 5 = 0  
 Column Totals: 90 (A) 275 (B)  
 Prevalence Index = B/A = 3.06

**Hydrophytic Vegetation Indicators:**  
 1 - Rapid Test for Hydrophytic Vegetation: X  
 2 - Dominance Test is >50%: X  
 3 - Prevalence Index is >3.0: 3.06  
 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet):

\_\_\_\_ Problematic Hydrophytic Vegetation? (Explain) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**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.  
**Saplings/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.)

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Cat Wind City/County: Centerville, Allegany county Sampling Date: 6/7/2018  
 Applicant/Owner: Invenery State: NY Sampling Point: 1U@WI  
 Investigator(s): SZ, JM Section, Township, Range: Town of Centerville  
 Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): none Slope %: 0  
 Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.47392 Long: -78.2666 Datum: WGS 1984  
 Soil Map Unit Name: Mongaup channery silt loam NWI classification: N/A  
 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 type="checkbox"/> No <input checked="" type="checkbox"/>
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.)

**HYDROLOGY**

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
Surface Water (A1) _____	Water-Stained Leaves (B9) _____	Surface Soil Cracks (B6) _____	
High Water Table (A2) _____	Aquatic Fauna (B13) _____	Drainage Patterns (B10) _____	
Saturation (A3) _____	Marl Deposits (B15) _____	Moss Trim Lines (B16) _____	
Water Marks (B1) _____	Hydrogen Sulfide Odor (C1) _____	Dry-Season Water Table (C2) _____	
Sediment Deposits (B2) _____	Oxidized Rhizospheres on Living Roots (C3) _____	Crayfish Burrows (C8) _____	
Drift Deposits (B3) _____	Presence of Reduced Iron (C4) _____	Stunted or Stressed Plants (D1) _____	
Algal Mat or Crust (B4) _____	Recent Iron Reduction in Tilled Soils (C6) _____	Geomorphic Position (D2) _____	
Iron Deposits (B5) _____	Thin Muck Surface (C7) _____	Shallow Aquifers (D3) _____	
Inundation Visible on Aerial Imagery (B7) _____	Other (Explain in Remarks) _____	Microtopographic Relief (D4) _____	
Sparsely Vegetated Concave Surface (B8) _____		FAC-Neutral Test (D5) _____	

Field Observations:		Wetland Hydrology Present?	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	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): _____		

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

Remarks:



Sampling Point: 1W@WII										
<b>SOIL</b>										
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (Inches)	Matrix			Redox Features			Texture	Remarks		
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>				
0-8	10YR 3/1	90	7.5YR 3/4	10	C	M	Mucky Loam/Clay			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. %Location; PL=Powr Lining, M=Matrix.										
<b>Hydric Soil Indicators:</b>										
___ Histosol (A1)	___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)			<b>Indicators for Problematic Hydric Soils<sup>2</sup>:</b>						
___ Histic Epipedon (A2)	___ Thin Dark Surface (S9) (LRR R, MLRA 149B)			___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)	___ Coast Prairie Redox (A16) (LRR K, L, R)					
___ Black Histic (A3)	___ High Chroma Sands (S11) (LRR K, L)			___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	___ Polyvalue Below Surface (S8) (LRR K, L)					
___ Hydrogen Sulphide (A4)	___ Stratified Layers (A5)			___ Loamy Mucky Mineral (F1) (LRR K, L)	___ Thin Dark Surface (S9) (LRR K, L)					
___ Depleted Below Dark Surface (A11)	___ Thick Dark Surface (A12)			___ Loamy Gleyed Matrix (F2)	___ Iron-Manganese Masses (F12) (LRR K, L, R)					
___ Sandy Mucky Mineral (S1)	___ Sandy Mucky Matrix (S4)			___ Depleted Dark Surface (F3)	___ Piedmont Floodplain Soils (F19) (MLRA 149B)					
___ Sandy Gleyed Matrix (S4)	___ Sandy Redox (S5)			___ X Redox Dark Surface (F6)	___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)					
___ Stripped Matrix (S6)	___ Dark Surface (S7)			___ Redox Depressions (F8)	___ Red Parent Material (F21)					
___ Dark Surface (S7)				___ Stripped Matrix (S6)	___ X Very Shallow Dark Surface (F22)					
				___ Dark Surface (S7)	___ Marl (F10) (LRR K, L)					
					___ Other (Explain in Remarks)					
*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
<b>Restrictive Layer (if observed):</b>										
Type: _____	Bedrock									
Depth (inches): _____	8			Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
Remarks: This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ( <a href="http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx">http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx</a> )										

Sampling Point: 1W@WII									
<b>VEGETATION – Use scientific names of plants.</b>									
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) <b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>45</u> x 1 = <u>45</u> FACW species <u>75</u> x 2 = <u>150</u> FAC species <u>25</u> x 3 = <u>75</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>145</u> (A) <u>270</u> (B) Prevalence Index = B/A = <u>1.86</u> <b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Index is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is >3.0 <input type="checkbox"/> 4 - Morphological Adaptations <sup>3</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>3</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. <b>Definitions of Vegetation Strata:</b> <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vines</b> – All woody vines greater than 3.28 ft in height. <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
	1. _____	_____	_____						
2. _____	_____	_____	_____						
3. _____	_____	_____	_____						
4. _____	_____	_____	_____						
5. _____	_____	_____	_____						
6. _____	_____	_____	_____						
7. _____	_____	_____	_____						
=Total Cover									
Sapling/Shrub Stratum (Plot size: 15 )									
1. _____	_____	_____	_____						
2. _____	_____	_____	_____						
3. _____	_____	_____	_____						
4. _____	_____	_____	_____						
5. _____	_____	_____	_____						
6. _____	_____	_____	_____						
7. _____	_____	_____	_____						
=Total Cover									
Herb Stratum (Plot size: 5 )									
1. <i>Eupatorium perfoliatum</i>	20	Yes	FACW						
2. <i>Juncus effusus</i>	15	No	OBL						
3. <i>Carex lurida</i>	15	No	OBL						
4. <i>Ranunculus acris</i>	25	Yes	FAC						
5. <i>Mentha spicata</i>	35	Yes	FACW						
6. <i>Scirpus atrovirens</i>	15	No	OBL						
7. <i>Impatiens capensis</i>	20	Yes	FACW						
8. _____	_____	_____	_____						
9. _____	_____	_____	_____						
10. _____	_____	_____	_____						
11. _____	_____	_____	_____						
12. _____	_____	_____	_____						
=Total Cover									
Woody Vine Stratum (Plot size: 30 )									
1. _____	_____	_____	_____						
2. _____	_____	_____	_____						
3. _____	_____	_____	_____						
4. _____	_____	_____	_____						
=Total Cover									
Remarks: (Include photo numbers here or on a separate sheet.)									

<b>WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region</b>									
Project/Site: <u>Alle-Cat</u> City/County: <u>Centerville, Allegany</u> Sampling Date: <u>6/22/2018</u>									
Applicant/Owner: <u>Invergency</u> State: <u>NY</u> Sampling Point: <u>1W@WII</u>									
Investigator(s): _____ Section, Township, Range: <u>Town of Centerville</u>									
Landform (hillside, terrace, etc.): <u>Floodplain</u> Local relief (concave, convex, none): <u>Concave</u> Slope %: <u>0-2</u>									
Subregion (LRR or MLRA): <u>LRR R, MLRA 140</u> Lat: <u>42.496522</u> Long: <u>-78.202134</u> Datum: <u>WGS 1984</u>									
Soil Map Unit Name: <u>Norchip silt loam</u> NWI classification: <u>PEM</u>									
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)									
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes <input type="checkbox"/> No <input type="checkbox"/>									
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)									
<b>SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.</b>									
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"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>									
Remarks: (Explain alternative procedures here or in a separate report.)									
<b>HYDROLOGY</b>									
<b>Wetland Hydrology Indicators:</b>									
Primary Indicators (minimum of one is required; check all that apply)									
<input checked="" type="checkbox"/> Surface Water (A1)	___ Water-Stained Leaves (B9)			___ Surface Soil Cracks (B6)					
<input checked="" type="checkbox"/> High Water Table (A2)	___ Aquatic Fauna (B13)			___ Drainage Patterns (B10)					
<input checked="" type="checkbox"/> Saturation (A3)	___ Marl Deposits (B15)			___ Moss Trim Lines (B16)					
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)			___ Dry-Season Water Table (C2)					
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)			___ Crayfish Burrows (C8)					
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)			___ Saturation Visible on Aerial Imagery (C9)					
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)			___ Stunted or Stressed Plants (D1)					
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)			___ Geomorphic Position (D2)					
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)			___ X Shallow Aquifers (D3)					
___ Sparsely Vegetated Concave Surface (B8)	___ FAC-Neutral Test (D5)			___ Microtopographic Relief (D4)					
<b>Field Observations:</b>									
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>1</u>								
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____								
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0</u>								
(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:									











SOIL		Sampling Point 1W@WMM						
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16	10YR 3/1	95	7.5YR 4/6	5	C	M	Mucky Loam/Clay	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Location: PL=Pure Lining, M=Matrix.								
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils <sup>3</sup> :					
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)						
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> MLRA 149B)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)						
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)						
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)						
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F7) (LRR K, L)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)						
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)						
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)						
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)						
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)						
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (F22)						
<input type="checkbox"/> Striped Matrix (S6)	<input type="checkbox"/> Marl (F10) (LRR K, L)	<input type="checkbox"/> Other (Explain in Remarks)						
<input type="checkbox"/> Dark Surface (S7)								
<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive Layer (if observed):								
Type: N/A								
Depth (inches):	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No							
Remarks:	This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ( <a href="http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx">http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx</a> )							

VEGETATION – Use scientific names of plants.					Sampling Point: 1W@WMM			
Tree Stratum (Plot size: 30 )					Absolute % Cover	Dominant Species?	Indicator Status	
1.								
2.								
3.								
4.								
5.								
6.								
7.								
=Total Cover								
Shrub/Stratum (Plot size: 15 )								
1.								
2.								
3.								
4.								
5.								
6.								
7.								
=Total Cover								
Herb Stratum (Plot size: 5 )								
1.	<i>Oenoclea sensibilis</i>	5	Yes	FACW				
2.	<i>Viburnum dentatum</i>	20	Yes	FAC				
3.	<i>Solidago rugosa</i>	5	Yes	FAC				
4.	<i>Carex scoparia</i>	5	Yes	FACW				
5.	<i>Carex lurida</i>	5	Yes	OBL				
6.								
7.								
8.								
9.								
10.								
11.								
12.								
=Total Cover								
Woody Vine Stratum (Plot size: 30 )								
1.								
2.								
3.								
4.								
=Total Cover								
Remarks: (Include photo numbers here or on a separate sheet.)								
Dominance Test worksheet:					Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)			
Total Number of Dominant Species Across All Strata: 5 (B)					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)			
Prevalence Index worksheet:					Total % Cover of: Multiply by:			
OBL species 5 x 1 = 5					FACW species 10 x 2 = 20			
FAC species 25 x 3 = 75					FACU species 0 x 4 = 0			
UPL species 0 x 5 = 0					Column Totals: 40 (A) 100 (B)			
Prevalence Index = B/A = 2.50					Hydrophytic Vegetation Indicators:			
X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%					X 3 - Prevalence Index is >3.0 X 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)			
Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					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, and greater than or equal to 3.28 ft (1 m) tall.			
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			
Remarks:								

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region			
Project/Site: Alle-Cat		City/County: Centerville, Allegany	Sampling Date: 6/22/2018
Applicant/Owner: Inverenergy		State: NY	Sampling Point: 1w@wmm
Investigator(s): JR, JM Section, Township, Range: Town of Centerville			
Landform (hillside, terrace, etc.): Bowl-shaped depression Local relief (concave, convex, none): Concave Slope %: 5-10			
Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.49290 Long: -78.20590 Datum: WGS 1984			
Soil Map Unit Name: Ontusia channery silt loam NWI classification: PEM			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No (If no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> 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: _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No			
Remarks: (Explain alternative procedures here or in a separate report.)			
HYDROLOGY			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Soaked Leaves (B9)	<input checked="" 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 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"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquifers (D3)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? Yes <input checked="" type="checkbox"/> No	Depth (inches): 1	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):		
Saturation Present? Yes <input checked="" type="checkbox"/> No	Depth (inches): 0		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.			
Remarks:			

SOIL

Sampling Point: 1U@WN

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix	Redox Features					Texture	Remarks
		Color (moist)	%	Color (moist)	%	Type <sup>1</sup>		
0-16	10YR 3/1	100				Loamy/Clayey		

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, <sup>1</sup>Location: PL=Pipe Lining, M=Matrix

**Hydric Soil Indicators:**

___ Histosol (A1)	___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	___ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
___ Histic Epipedon (A2)	___ MLRA 149B	___ Coast Prairie Redox (A16) (LRR K, L, R)
___ Black Histic (A3)	___ Thin Dark Surface (S9) (LRR R, MLRA 149B)	___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
___ Hydrogen Sulfide (A4)	___ High Chroma Sands (S11) (LRR K, L)	___ Polyvalue Below Surface (S8) (LRR K, L)
___ Stratified Layers (A5)	___ Loamy Mucky Mineral (F1) (LRR K, L)	___ Thin Dark Surface (S9) (LRR K, L)
___ Depleted Below Dark Surface (A11)	___ Loamy Gleyed Matrix (F2)	___ Iron-Manganese Masses (F12) (LRR K, L, R)
___ Thick Dark Surface (A12)	___ Depleted Matrix (F3)	___ Piedmont Floodplain Soils (F19) (MLRA 149B)
___ Sandy Mucky Mineral (S1)	___ Redox Dark Surface (F6)	___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
___ Sandy Gleyed Matrix (S4)	___ Depleted Dark Surface (F7)	___ Red Parent Material (F21)
___ Sandy Redox (S5)	___ Redox Depressions (F8)	___ Very Shallow Dark Surface (F22)
___ Stripped Matrix (S6)	___ Marl (F10) (LRR K, L)	___ Other (Explain in Remarks)
___ Dark Surface (S7)		

<sup>2</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_ No X

Remarks:  
This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142qz\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142qz_051293.docx))

VEGETATION - Use scientific names of plants.

Sampling Point: 1U@WN

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

Sapling/Shrub Stratum (Plot size: 15 )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
			=Total Cover

Herb Stratum (Plot size: 5 )

Species	Absolute % Cover	Dominant Species?	Indicator Status
1. Podophyllum peltatum	30	Yes	FACU
2. Dryopteris intermedia	35	Yes	FACU
3. Acer saccharum	15	No	FACU
4. Prunus serotina	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85		=Total Cover

Woody Vine Stratum (Plot size: 30 )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
			=Total Cover

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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Cat City/County: Centerville, Allegany Sampling Date: 6/22/2018

Applicant/Owner: Invernergy State: NY Sampling Point: 1U@WN

Investigator(s): JR\_JH Section, Township, Range: Town of Centerville

Landform (hillside, terrace, etc.): Hillside Steep Local relief (concave, convex, none) None Slope %: 0-5

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.7404 Long: -78.29643 Datum: WGS 1984

Soil Map Unit Name: Napoli Silt loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ___ No <u>X</u>	Is the Sampled Area within a Wetland? Yes ___ No <u>X</u>
Hydric Soil Present? Yes ___ No <u>X</u>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes ___ No <u>X</u>	

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

**HYDROLOGY**

**Wetland Hydrology Indicators:**

___ Primary Indicators (minimum of one is required; check all that apply)	___ Secondary Indicators (minimum of two required)
___ Surface Water (A1)	___ Water-Stained Leaves (B9)
___ High Water Table (A2)	___ Aquatic Fauna (B13)
___ Saturation (A3)	___ Marl Deposits (B15)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)
___ Sparsely Vegetated Concave Surface (B8)	___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes ___ No <u>X</u>	Depth (inches): _____
Water Table Present? Yes ___ No <u>X</u>	Depth (inches): _____
Saturation Present? Yes ___ No <u>X</u>	Depth (inches): _____
(Includes capillary fringe)	

Wetland Hydrology Present? Yes \_\_\_ No X

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

Remarks:









SOIL Sampling Point: 1W@W0

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-1	10YR 2/1	100						
1-4	5G 3/1	100						
4-12	5G 5/1	65	7.5YR 5/6	35	C	M	Loamy/Clayey	Prominent redox concentrations

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup>Location: PL=Pure Lining, M=Matrix.

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	<input type="checkbox"/> Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> MLRA 149B	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulphide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F7) (LRR K, L)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Striped Matrix (S6)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
	<input type="checkbox"/> Striped Matrix (S6)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Marl (F10) (LRR K, L)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx))

VEGETATION – Use scientific names of plants. Sampling Point: 1W@W0

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

=Total Cover

**Sapling/Shrub Stratum (Plot size: 15)**

1.			
2.			
3.			
4.			
5.			
6.			
7.			

=Total Cover

**Herb Stratum (Plot size: 5)**

Species	% Cover	Yes	No	Indicator
1. <i>Impatiens capensis</i>	75	Yes		FACW
2. <i>Carex lacustris</i>	40	Yes		OBL
3. <i>Dryopteris intermedia</i>	3	No		FAC
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

=Total Cover

**Woody Vine Stratum (Plot size: 30)**

1.			
2.			
3.			
4.			

=Total Cover

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

**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: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of: Multiply by:

OBL species	40	x 1 =	40
FACW species	75	x 2 =	150
FAC species	3	x 3 =	9
ACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	118	(A)	199
Prevalence Index = B/A =			1.69

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≥3.0

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>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, and greater than or equal to 3.28 ft (1 m) tall.

**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

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Alle-Cat City/County: Centerville, Allegany Sampling Date: 6/22/2018

Applicant/Owner: Invernergy State: NY Sampling Point: 1W@W0

Investigator(s): JR, JH Section, Township, Range: Town of Centerville

Landform (hillside, terrace, etc.): Bowl-shaped depression Local relief (concave, convex, none): Concave Slope %: 2-5

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.47281 Long: -78.30018 Datum: WGS 1984

Soil Map Unit Name: Napoli Silt 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 <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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

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

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Soaked 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"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>1</u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>0</u>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>0</u>

(Includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks:









SOIL Sampling Point: 1U@WQQ

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features			Texture	Remarks
	Color (moist)	%		Color (moist)	%	Type <sup>1</sup>		
0-2	10YR 2/1	100					Loamy/Clayey	
2-6	10YR 3/6	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Poly Lining, M=Matrix.

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	<b>Indicators for Problematic Hydric Soils<sup>2</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> MLRA 149B	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulphide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Marl (F10) (LRR K, L)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Dark Surface (S7)		<input type="checkbox"/> Other (Explain in Remarks)

<sup>2</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: <u>Rock/Root</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth (inches): <u>6</u>	

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: 1U@WQQ

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Carpinus caroliniana</i>	20	Yes	FAC
2. <i>Fagus grandifolia</i>	10	No	FACU
3. <i>Acer saccharum</i>	10	No	FACU
4. <i>Quercus rubra</i>	30	Yes	FACU
5. <i>Ostrya virginiana</i>	15	No	FACU
6.			
7.			

**Dominance Test worksheet:**

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (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>45</u> x 3 =	<u>135</u>
FACU species <u>150</u> x 4 =	<u>600</u>
UPL species <u>0</u> x 5 =	<u>0</u>
Column Totals: <u>195</u> (A)	<u>735</u> (B)
Prevalence Index = B/A =	<u>3.77</u>

**Hydrophytic Vegetation Indicators:**

<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
<input type="checkbox"/> 2 - Dominance Test is >50%
<input type="checkbox"/> 3 - Prevalence Index is ≥3.0
<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup>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, and greater than or equal to 3.28 ft (1 m) tall.

**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.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Alle-Cat Wind City/County: Centerville, Allegany county Sampling Date: 8/18/2018

Applicant/Owner: Invenergy State: NY Sampling Point: 1U@WQQ

Investigator(s): SZJM Section, Township, Range: Town of Centerville

Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0-2

Subregion (LRR or MLRA): LRR R, MLRA 140 Lat: 42.50431 Long: -78.224 Datum: WGS 1984

Soil Map Unit Name: Almond Silt loam NWI classification: N/A

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"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: <u></u>
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

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

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<input type="checkbox"/> Primary Indicators (minimum of one is required; check all that apply)	<input type="checkbox"/> Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Shallow Aquifers (D3)
	<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): <u></u>	Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u></u>
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u></u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

(includes capillary fringe)

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

Remarks:























SOIL Sampling Point DP-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type	Loc	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-1	10YR 3/2	100					S: L	mixed with organics
1-4	10YR 4/1	85	5YR 4/6	15	C	M	CL	distinct
4-7	10YR 4/1	70	5YR 4/6	30	C	M	S: CL	
7-8	10YR 5/1	50	10YR 5/1	40	C	M	S: CL	
8-20	10YR 5/1	80	10YR 3/1	15	C	M	C	
			5YR 5/8	5	C	M		

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pipe Lining, M=Matrix

Hydric Soil Indicators:

— Histosol (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1498)
— Histic Epipedon (A2)	— MLRA 1498)	— Coated Prairie Redox (A16) (LRR K, L, R)
— Black Histic (A3)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Mucky Mineral (F1) (LRR K, L)	— Dark Surface (S7) (LRR K, L, M)
— Stratified Layers (A5)	— Loamy Clayed Matrix (F2)	— Polyvalue Below Surface (S8) (LRR K, L)
— Depleted Below Dark Surface (A11)	— Depleted Matrix (F3)	— Thin Dark Surface (S9) (LRR K, L)
— Thick Dark Surface (A12)	— Tackox Dark Surfaces (F6)	— Iron-Manganese Masses (F12) (LRR K, L, R)
— Sandy Mucky Mineral (S1)	— Depleted Dark Surface (F7)	— Piedmont Floodplain Soils (F19) (MLRA 1498)
— Sandy Clayed Matrix (S4)	— Redox Depressions (F8)	— Mesic Spodic (TAG) (MLRA 144A, 145, 1498)
— Sandy Redox (S5)	— Redox Depressions (F8)	— Rat Parent Material (F15)
— Striped Matrix (S6)	— Very Shallow Dark Surface (TF12)	— Other (Explain in Remarks)
— Dark Surface (S7) (LRR R, MLRA 1498)		

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: NA

Depth (inches): —

Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point DP-001

Tree Stratum (Plot size 30')	Absolute % Cover	Dominant Species	Indicator Status
1. <i>Tsuga canadensis</i>	30	Y	FACW
2. <i>Betula alleghaniensis</i>	30	Y	FACW
3. <i>Acer rubrum</i>	5	N	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57% (AB)

Prevalence Index Worksheet:

Total % Cover of: 65 = Total Cover

OBL species: x1 =

FACW species: x2 =

FAC species: x3 =

FACU species: x4 =

UPL species: x5 =

Column Totals: (A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is >3.0

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

Problematic Hydrophytic Vegetation? (Explain)

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 vine - All woody vines greater than 3.28 ft in height.

Herb Stratum (Plot size 5')

Species	Absolute % Cover	Dominant Species	Indicator Status
1. <i>Oxyclea sensibilis</i>	50	Y	FACW
2. <i>Proximus pennsylvanicus</i>	5	N	FACU
3. <i>Impatiens capensis</i>	40	Y	FACW
4. <i>Athyrium angustum</i>	5	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Wood/Vine Stratum (Plot size 30')

Species	Absolute % Cover	Dominant Species	Indicator Status
1. NA			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Hydrophytic Vegetation Present? Yes  No

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

*Betula alleghaniensis* with buttressed trunks throughout wetland. Indicator status therefore changed from FAC to FACW.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Title: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 8/6/2018

Applicant/Owner: Invenergy, LLC City/County: State: NY Sampling Point: DP-001

Investigator(s): Emma Mrowka and Michael Bastardo Section, Township, Range, N/A

Landform (topography, terraces, etc.): depression Local relief (concave, convex, none): concave Slope (ft): 1.3

Subregion (LRR or MLRA): LRR R Lat: 42 46 38 N Long: -78 50 17 W Datum: NAD 83

Soil Map Unit Name: 60A - Nonacid silt loam - 0 to 2 ped. slopes NHT classification: PSSIE

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  Is the Sampled Area within a Wetland? Yes  No

Hydric Soil Present? Yes  No  Wetland Hydrology Present? Yes  No  (If yes, optional Wetland Site ID: PA-Wetland-001)

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

PFO data point for wetland: 001 connects to NW1 PSSIE and DEC FWJ FD-5

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required, check all that apply)	Secondary Indicators (minimum of two required)
— Surface Water (A1)	— Surface Soil Cracks (B6)
— High Water Table (A2)	— Drainage Patterns (B10)
— Saturation (A3)	— Most Tm Lines (B14)
— Water Marks (B1)	— Dry-Season Water Table (C2)
— Sediment Deposits (B2)	— Crayfish Burrows (C8)
— Algal Mat or Crust (B4)	— Saturation Visible on Aerial Imagery (C9)
— Iron Deposits (B5)	— Buried or Stressed Plants (D1)
— Recent Iron Reduction in Tilled Soils (C5)	— Geomorphic Position (D2)
— Thin Muck Surface (C6)	— Shallow Aquifer (D3)
— Inundation Visible on Aerial Imagery (B7)	— Microtopographic Relief (D4)
— Spongy Vegetated Concave Surface (B8)	— FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes  No  Depth (inches): —

Water Table Present? Yes  No  Depth (inches): 18 4

Saturation Present? Yes  No  Depth (inches): 18 4

Wetland Hydrology Present? Yes  No

Remarks:

Drainage patterns flowing west observed throughout wetland.

SOIL Sampling Point: DP-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Moist Color (moist)	%	Redox Features Color (moist)	%	Type	Loc	Texture	Remarks
0-2	5YR 2/2	100					S.L	Organic soil
2-5	5YR 2/1	100					S.L	mixed organics
5-10	10YR 4/2	60	10YR 4/2	40	C	M	S.C.L	
			7.5YR 3/1	10	C	M	CL	
10-20	2.5Y 5/4	70	10YR 7/8	30	C	M	S.L	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, M=Masked Sand Grains. Location: PL=Pure Living, M=Matrix.

Hydric Soil Indicators:

— Histoid (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1498)
— Histic Epipedon (A2)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— Coarse Prairie Histic (A16) (LRR K, L, R)
— Black Histic (A3)	— Loamy Mucky Mineral (F1) (LRR K, L)	— 8 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Gleyed Matrix (F2)	— Dark Surface (S7) (LRR K, L, M)
— Stratified Layers (A5)	— Depleted Matrix (F3)	— Polyvalue Below Surface (S8) (LRR K, L)
— Depleted Below Dark Surface (A11)	— Redox Dark Surface (F6)	— Thin Dark Surface (S9) (LRR K, L)
— Thick Dark Surface (A12)	— Depleted Dark Surface (F7)	— Iron-Manganese Masses (F12) (LRR K, L, R)
— Sandy Mucky Mineral (S1)	— Redox Depressions (F8)	— Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 149B)
— Sandy Gleyed Matrix (S4)	— Sand Spodos (TA6) (MLRA 144A, 145, 149B)	— Mastic Spodos (TA6) (MLRA 144A, 145, 149B)
— Sandy Redox (S5)	— Stripped Matrix (S6)	— Red Parent Material (F21)
— Stripped Matrix (S6)	— Dark Surface (S7) (LRR K, MLRA 1498)	— Very Shallow Dark Surface (F12)
		— Other (Explain in Remarks)

Indicators of hydric vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
Type: N/A  
Depth (inches): —

Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: DP-002

Tree Stratum (Plot size: 30 ft r)

Tree Species	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Tsuga canadensis</i>	75	Y	FAUW
2. <i>Fagus grandifolia</i>	5	N	FAUW
3. <i>Betula alleghaniensis</i>	15	N	FAUW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

95 = Total Cover

Shrub/Straw Stratum (Plot size: 15 ft r)

Shrub/Straw Species	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Tsuga canadensis</i>	20	Y	FAUW
2. <i>Fagus grandifolia</i>	10	Y	FAUW
3.			
4.			
5.			
6.			
7.			

30 = Total Cover

Herb Stratum (Plot size: 5 ft r)

Herb Species	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Fagus grandifolia</i>	5	N	FAUW
2. <i>Rubus alleghaniensis</i>	2	N	FAUW
3. <i>Aralia nudicaulis</i>	5	N	FAUW
4. <i>Dryopteris marginalis</i>	15	Y	FAUW
5. <i>Polypodium canadense</i>	3	N	FAUW
6.			
7.			
8.			
9.			
10.			
11.			
12.			

30 = Total Cover

Woody Vine Stratum (Plot size: 30 ft r)

Woody Vine Species	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>N/A</i>			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

0 = Total Cover

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

Dominance Test worksheet:  
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)  
Total Number of Dominant Species Across All Strata: 4 (B)  
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (AB)

Prevalence Index worksheet:  
Total % Cover of: Multiply by:  
OBL species x 1 =  
FACW species x 2 =  
FAC species x 3 =  
UPL species x 5 =  
Column Totals: (A) (B)  
Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:  
1 - Rapid Test for Hydrophytic Vegetation  
2 - Dominance Test is >0%  
3 - Prevalence Index is <3.0  
4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)  
Problematic Hydrophytic Vegetation? (Explain)

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.  
Sagittifera - 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 vine - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes  No

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus State: NY Sampling Date: 09/04/18  
Applicant/Owner: Inverenergy, LLC Section, Township, Range, N/A State: NY Sampling Point: DP-002  
Investigator(s): Emma Mrowka and Michael Bastedo Local relief (concave, convex, none): Concave Slope (%): 1-3  
Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1-3  
Subregion (LRR or MLRA): LRR R Lat: 42.415818 Long: -78.52584 Datum: NAD 83  
Soil Map Unit Name: 6A - Hapl. silt loam, brn, 1 percent clay MFI classification: Not mapped  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
Are the soil N or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
Are Vegetation N Soil N, or Hydrology N 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"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks: (Explain alternative procedures here or in a separate report.)  
Upland data point for Wetland 001

HYDROLOGY

Wetland Hydrology Indicators:  
Primary Indicators (minimum of one is required; check all that apply):  
— Surface Water (A1) — Water-Stained Leaves (B8) — Surface Soil Cracks (B9)  
— High Water Table (A2) — Aquatic Fauna (B10) — Moss Trim Lines (B16)  
— Saturation (A3) — Mud Deposits (B15) — Dry-Season Water Table (C2)  
— Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Crayfish Burrows (C8)  
— Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Saturation Visible on Aerial Imagery (C9)  
— Drift Deposits (B3) — Presence of Reduced Iron (C4) — Stunted or Stressed Plants (D1)  
— Algal Mat or Crust (B4) — Presence of Redox Iron in Tilled Soils (C6) — Geomorphic Position (D2)  
— Iron Deposits (B5) — Thin Muck Surface (C7) — Shallow Aquitard (D3)  
— Inundation Visible on Aerial Imagery (B7) — Specially Vegetated Concave Surface (B8) — Microtopographic Relief (D4)  
— FAC-Neutral Test (D5)

Field Observations:  
Surface Water Present? Yes  No  Depth (inches): —  
Water Table Present? Yes  No  Depth (inches): —  
Saturation Present? Yes  No  Depth (inches): —  
Wetland Hydrology Present? Yes  No   
(Includes capillary fringe)  
Describe Recorded Data (stream gauge, monitoring well, serial photos, previous inspections), if available:

Remarks:  
No Wetland hydrology observed

**SOIL**

Sampling Point: DP-005

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (inches)	Matrix	Color (moist)	%	Color (moist)	%	Type	Loc	Texture	Remarks
0-5	10YR 3/2	90	7.5YR 4/6	10	C	M	S:L		
5-12	10YR 4/6	85	7.5YR 4/6	15	C	M	S:L		
12-20	7.5Y 6/2	60	10YR 3/2	20	C	M	S:L		
			7.5R 4/6	20	C	M			

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Massed Sand Grains, Location: PL=Pipe Lining, M=Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR, R, MLRA 1498)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 1498)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 1498)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 1498)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Clayed Matrix (F2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Standy Mucky Mineral (B1)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 1498)
<input type="checkbox"/> Sandy Clayed Matrix (B4)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Mosaic Spodos (T40) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Sandy Redox (B5)		<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Striped Matrix (B6)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 1498)		<input type="checkbox"/> Other (Explain in Remarks)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: N/A  
 Depth (inches): —

Hydric Soil Present? Yes  No

Remarks:

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

Sampling Point: DP-005

Tree Stratum (Plot size: 30-ft r.)	Absolute % Cover	Dominant Species/Status	Indicator
1. <i>Acer rubrum</i>	5	A-Y	PK
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Total % Cover = 5 = Total Cover

Herb Stratum (Plot size: 5-ft r.)

Species	Absolute % Cover	Dominant Species/Status	Indicator
1. <i>Onoclea sensibilis</i>	60	Y	FKW
2. <i>Sagittaria spp.</i>	20	N	CBL
3. <i>Sagittaria spp.</i>	15	N	CBL
4. <i>Viburnum dentatum</i>	5	N	FKL

Total % Cover = 10 = Total Cover

Woody Vine Stratum (Plot size: 30-ft r.)

Species	Absolute % Cover	Dominant Species/Status	Indicator
1.			
2.			
3.			
4.			

Total % Cover = 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% (AB)

Prevalence Index worksheet:  
 Total % Cover of: — Multiplier: —  
 OBL species: — x 1 = —  
 FACW species: — x 2 = —  
 FAC species: — x 3 = —  
 FACU species: — x 4 = —  
 UPL species: — x 5 = —  
 Column Totals: (A) — (B) —  
 Prevalence Index = B/A = —

Hydrophytic Vegetation Indicators:  
 1 - Rapid Test for Hydrophytic Vegetation  
 2 - Dominance Test is >50%  
 3 - Prevalence Index is <3.0  
 4 - Morphological Adaptations\* (Provide supporting data in Remarks or on a separate sheet)  
 \*Indicators of hydro 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 stem, and woody plants less than 3.28 ft tall.  
 Woody vine - 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.)  
 Unknown goldenrod species was not able to be identified so its percentage cannot be used for the classification of hydrophytic vegetation.

**WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region**

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 08/07/18  
 Applicant/Owner: Invenery, LLC State: NY  
 Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 5  
 Subregion (LRR or MLRA): LRR R Lat: 42.84282 Long: -78.81951 Datum: NAD 83  
 Soil Map Unit Name: 6C8, Mpl silt loam, 3 to 8 percent slopes NWI classification: U1t unsppt  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any errors 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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks: (Explain alternative procedures here or in a separate report.)  
 PEM data point for FA-Wetland-005

**HYDROLOGY**

Wetland Hydrology Indicators: (minimum of one is required, check all that apply)

<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 checked="" type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Muck Deposits (B15)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C6)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:  
 Surface Water Present? Yes  No  Depth (inches): —  
 Water Table Present? Yes  No  Depth (inches): —  
 Saturation Present? Yes  No  Depth (inches): —  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks:  
 Drainage patterns flowing west towards ditch - 001 (down slope)

**SOIL** Sampling Point: DP-006

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Moids	Redox Features	Remarks				
Color (moist)	%	Color (moist)	Type	Loc	Texture		
0-10	10YR 4/6	70	10YR 4/6	20	C	M	SL
10-20	10YR 5/4	60	10YR 4/6	10	C	M	SL
			10YR 4/6	20	C	M	SL
			10YR 3/2	20	C	M	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pure Lining, M=Matrix

Hydric Soil Indicators:

— Histoc (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A15) (LRR K, L, MLRA 1498)
— Black Histic (A3)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— Coast Prairie Redox (A16) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Mucky Mineral (F1) (LRR K, L)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Stratified Layers (A5)	— Loamy Clayed Matrix (F2)	— Dark Surface (S7) (LRR K, L, M)
— Depleted Below Dark Surface (A11)	— Depleted Matrix (F3)	— Polyvalue Below Surface (S5) (LRR K, L)
— Thick Dark Surface (A12)	— Redox Dark Surface (F6)	— Thin Dark Surface (S8) (LRR K, L)
— Sandy Mucky Mineral (S1)	— Depleted Dark Surface (F7)	— Iron-Manganese Masses (F12) (LRR K, L, R)
— Sandy Clayed Matrix (S4)	— Redox Depressors (F8)	— Piedmont Floodplain Sols (F19) (MLRA 1498)
— Sandy Redox (S5)	— Very Shallow Dark Surface (TF12)	— Mastic Spodic (T14) (MLRA 144A, 145, 149B)
— Striped Matrix (S6)	— Other (Explain in Remarks)	— Red Parent Material (F21)
— Dark Surface (S7) (LRR R, MLRA 1498)		— Very Shallow Dark Surface (TF12)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: N/A  
 Depth (inches): -  
 Hydric Soil Present? Yes  No

Remarks:

**VEGETATION** - Use scientific names of plants. Sampling Point: DP-006

Tree Stratum (Plot size: 30-ft x 1)

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Shrub/Straw Stratum (Plot size: 5-ft x 1)

1. <i>Begonia tremuloides</i>	5	Y	FACU
2. <i>Viburnum dentatum</i>	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Herb Stratum (Plot size: 5-ft x 1)

1. <i>Silphium laciniatum</i>	70	Y	FACU
2. <i>Rubus alleghaniensis</i>	20	Y	FACU
3. <i>Apocynum cannabinum</i>	5	N	FACU
4. <i>Onoclea sensibilis</i>	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: 30-ft x 1)

1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Hydrophytic Vegetation Present? Yes  No

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

**WETLAND DETERMINATION DATA FORM** - Northcentral and Northeast Region

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 08/07/18  
 Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-006  
 Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex Slope (%): 5  
 Subregion (LRR or MLRA): LRR R Lat: 42.4642 N Long: -79.9152 W Datum: NAD 83  
 Soil Map Unit Name: GCR, Mpel silt loam, 3 to 8 percent slopes NWI classification: Not mapped  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N 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"/>
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.)  
Updated data point for Wetland-003

**HYDROLOGY**

Wetland Hydrology Indicators:

— Surface Water (A1)	— Water-Stained Leaves (B6)	— Surface Soil Cracks (B8)
— High Water Table (A2)	— Aquatic Fauna (B13)	— Drainage Patterns (B10)
— Saturation (A3)	— Marl Deposits (B15)	— Moss Trim Lines (B16)
— Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	— Dry-Season Water Table (C2)
— Sediment Deposits (B2)	— Odorous Rhizospheres on Living Roots (C3)	— Crawfish Burrows (C9)
— Drift Deposits (B3)	— Presence of Reduced Iron (C4)	— Saturation Visible on Aerial Imagery (C9)
— Algal Mat or Crust (B4)	— Recent Iron Reduction in Tilled Soils (C6)	— Stunted or Stressed Plants (D1)
— Iron Deposits (B5)	— Thin Muck Surface (C7)	— Geomorphic Position (D2)
— Inundation Visible on Aerial Imagery (B7)	— Other (Explain in Remarks)	— Shallow Aquifer (C3)
— Sparingly Vegetated Concave Surface (B8)	— FAC-Neutral Test (D6)	— Microtopographic Relief (D4)

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>-</u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>-</u>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>-</u>

Wetland Hydrology Present? Yes  No

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

Remarks:  
No wetland hydrology observed

SOIL

Sampling Point: DP-007

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-4	10YR3/6	95	7.5R 4/6	5	C	M	S:L	
4-12	10YR3/6	85	7.5R 4/6	15	C	M	S:L	
12-20	10YR6/2	70	7.5R 3/6	30	C	M	S:L	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

— Histosol (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1498)
— Hemic Epipedon (A2)	— Thin Dark Surface (S8) (LRR R, MLRA 1498)	— Coast Prairie Redox (A16) (LRR K, L, R)
— Black Hemic (A3)	— Thin Mucky Peat or Peat (S3) (LRR K, L, R)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Mucky Mineral (F1) (LRR K, L)	— Dark Surface (S7) (LRR K, L, M)
— Stratified Layers (A5)	— Loamy Clayed Matrix (F2)	— Polyvalue Below Surface (S5) (LRR K, L)
— Depleted Below Dark Surface (A11)	X Depleted Matrix (F3)	— Thin Dark Surface (S9) (LRR K, L)
— Thick Dark Surface (A12)	X Redox Dark Surface (F6)	— Iron-Manganese Masses (F12) (LRR K, L, R)
— Sandy Mucky Mineral (B1)	— Depleted Dark Surface (F7)	— Piedmont Floodplain Soils (F19) (MLRA 1498)
— Sandy Clayed Matrix (B4)	— Redox Depressions (F8)	— Mosaic Spodic (T48) (MLRA 144A, 145, 1498)
— Sandy Redox (B5)	— Very Shallow Dark Surface (TF12)	— Red Parent Material (F21)
— Stripped Matrix (B6)	— Dark Surface (S7) (LRR R, MLRA 1498)	— Other (Explain in Remarks)

<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: MA

Depth (inches): —

Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: DP-007

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			
5.			
6.			
7.			
0 = Total Cover			
Shrub/Straw Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix spp	5		
2.			
3.			
4.			
5.			
6.			
7.			
0 = Total Cover			
Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status
1. Scirpus cyperinus	25	Y	OBL
2. Oenothera sensibilis	20	Y	FACU
3. Fragaria virginiana	10	N	FACU
4. Solidago rugosa	20	Y	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
85 = Total Cover			
Woody/Vine Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			
0 = Total Cover			

**Dominance Test worksheet:**

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

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

Percent of Dominant Species That Are OBL, FACU, or FAC: 100 (AB)

**Prevalence Index worksheet:**

Total % Cover of: — Multiplied by:

OBL species x 1 = —

FACU species x 2 = —

FAC species x 3 = —

LFL species x 4 = —

UPL species x 5 = —

Column Totals: (A) — (B) —

Prevalence Index = B/A = —

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is >3.0  4 - Morphological Adaptations\* (Provide supporting data in Remarks or on a separate sheet)

**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 vine** - 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.)

Sapling/shrub stratum not included in dominance calculations since Salix was not identified to species.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Catt Wind Energy City/County: Allegany Sampling Date: 08/08/18

Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-007

Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range, N/A

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, rose): Concave Slope (ft): 5

Subregion (LRR or MLRA): LRR R Loc: 42N 45W Long: -78.3169 Datum: NAD 83

Soil Map Unit Name: 68A - Typic silt loam, 6a, 3 second stage NWI classification: DOT mapped

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No

Are Vegetation N, Soil N, or Hydrology N 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  Is the Sampled Area within a Wetland? Yes  No

Hydric Soil Present? Yes  No

Wetland Hydrology Present? Yes  No  If yes, optional Wetland Site ID: 102 & 1 land - 008

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

DEM data point for Wetland - 008

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

— Surface Water (A1)	— Water-Stained Leaves (B9)	— Surface Soil Cracks (B6)
— High Water Table (A2)	— Aquatic Fauna (B13)	— Drainage Patterns (B10)
— Saturation (A3)	— Muck Deposits (B15)	— Moss Trim Lines (B16)
— Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	— Dry-Season Water Table (C2)
— Sediment Deposits (B2)	— Oxidized Rhizospheres on Living Roots (C3)	— Clayfish Burrows (C6)
— Drift Deposits (B3)	— Presence of Reduced Iron (C4)	— Saturation Visible on Aerial Imagery (C5)
— Algal Mat or Crust (B4)	— Recent Iron Reduction in Tilled Soils (C6)	— Started or Stressed Plants (D1)
— Iron Deposits (B5)	— Thin Muck Deposits (C7)	— Geomorphic Position (D2)
— Foundation Visible on Aerial Imagery (B7)	— Other (Explain in Remarks)	— Shallow Aquifer (D3)
— Sparingly Vegetated Concave Surface (B8)	— FAC-Neutral Test (D5)	— Microtopographic Relief (D4)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): —

Water Table Present? Yes  No  Depth (inches): —

Saturation Present? Yes  No  Depth (inches): —

(Includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks:

**SOIL**

Sampling Point: DP-008

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc		
0-10	10YR 5/2	98	7.5YR 5/6	2	C	M	SL	
10-20	10YR 5/3	60	10R 5/6	40	C	M	SL	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains Location: PL=Pure Lining, M=Matrix

**Hydric Soil Indicators:**

— Histic (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1498)
— Histic Epipedon (A2)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— Coast Prairie Redox (A16) (LRR K, L, R)
— Black Histic (A3)	— Loamy Mucky Mineral (F1) (LRR K, L)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Gleyed Matrix (F2)	— Dark Surface (S7) (LRR K, L, M)
— Stratified Layers (A5)	— Depleted Below Dark Surface (A11)	— Polyvalue Below Surface (S8) (LRR K, L)
— Thick Dark Surface (A12)	— Depleted Matrix (F3)	— Thin Dark Surface (S9) (LRR K, L)
— Sandy Mucky Mineral (S1)	— Redox Dark Surface (F6)	— Iron-Manganese Masses (F12) (LRR K, L, R)
— Sandy Gleyed Matrix (S4)	— Depleted Dark Surface (F7)	— Piedmont Floodplain Sols (F19) (MLRA 1498)
— Sandy Redox (S5)	— Redox Depressions (F8)	— Mosaic Spodic (T4d) (MLRA 144A, 145, 149B)
— Striped Matrix (S6)	— Very Shallow Dark Surface (TF12)	— Red Parent Material (F21)
— Dark Surface (S7) (LRR R, MLRA 1498)	— Other (Explain in Remarks)	— Very Shallow Dark Surface (TF12)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: NA  
 Depth (inches): —

Hydric Soil Present? Yes X No —

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point: DP-008

**Tree Stratum** (Plot size: 30-ft r.)

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>NA</u>			
2. <u> </u>			
3. <u> </u>			
4. <u> </u>			
5. <u> </u>			
6. <u> </u>			
7. <u> </u>			
<u>0</u> = Total Cover			

**Sapling/Shrub Stratum** (Plot size: 15-ft r.)

Sapling/Shrub Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>NA</u>			
2. <u> </u>			
3. <u> </u>			
4. <u> </u>			
5. <u> </u>			
6. <u> </u>			
7. <u> </u>			
<u>0</u> = Total Cover			

**Herb Stratum** (Plot size: 5-ft r.)

Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Solidago canadensis</u>	<u>10</u>	<u>N</u>	<u>FACU</u>
2. <u>Fragaria virginiana</u>	<u>40</u>	<u>Y</u>	<u>FALW</u>
3. <u>Juncus effusus</u>	<u>5</u>	<u>N</u>	<u>ODL</u>
4. <u>Solidago rugosa</u>	<u>10</u>	<u>N</u>	<u>FAC</u>
5. <u>Viburnum dentatum</u>	<u>5</u>	<u>N</u>	<u>FAC</u>
6. <u>Daucus carota</u>	<u>5</u>	<u>N</u>	<u>UPL</u>
7. <u> </u>			
8. <u> </u>			
9. <u> </u>			
10. <u> </u>			
11. <u> </u>			
12. <u> </u>			
<u>75</u> = Total Cover			

**Woody Vine Stratum** (Plot size: 30-ft r.)

Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>NA</u>			
2. <u> </u>			
3. <u> </u>			
4. <u> </u>			
<u>0</u> = Total Cover			

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

**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   Multiplier by:

OBL species   x 1 =  

FACW species   x 2 =  

FAC species   x 3 =  

FACU species   x 4 =  

UPL species   x 5 =  

Column Totals: (A)   (B)  

Prevalence Index = A/B =  

**Hydrophytic Vegetation Indicators:**

— 1 - Rapid Test for Hydrophytic Vegetation

— 2 - Dominance Test is >50%

— 3 - Prevalence Index is <3.0'

— 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)

Indicators of hydrophytic 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 stem, and woody plants less than 3.28 ft tall.

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

Hydrophytic Vegetation Present? Yes   No X

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Alle-Catt Wind Energy City/County: Allegany Sampling Date: 08/03/19

Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-008

Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: N/A

Landform (hillside, terrace, etc.): 4:11 slope Local relief (concave, convex, none): convex Slope (%): 5

Subregion (LRR or MLRA): LRR R Lat: 41.414807 Long: -78.361073 Datum: NAD 83

Soil Map Unit Name: 60A: Hapt silt/clay, 6.1-3 percent slopes NWI classification: not mapped

Are climatic / hydrologic conditions of the site typical for this time of year? Yes X No   (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes Y No  

Are Vegetation N, Soil N, or Hydrology N 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>

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

Upland data point for FA-Wetland-008

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required, check all that apply)

— Surface Water (A1)	— Water-Stained Leaves (B6)	— Secondary Indicators (minimum of two required)
— High Water Table (A2)	— Aquatic Fauna (B13)	— Surface Soil Cracks (B8)
— Saturation (A3)	— Marl Deposits (B15)	— Drainage Patterns (B10)
— Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	— Moss Trim Lines (B16)
— Sediment Deposits (B2)	— Oxidized Rhizospheres on Living Roots (C3)	— Dry-Season Water Table (C2)
— Drift Deposits (B3)	— Presence of Reduced Iron (C4)	— Crayfish Burrows (C8)
— Algal Mat or Crust (B4)	— Recent Iron Reduction in Tilled Soils (C6)	— Saturation Visible on Aerial Imagery (C9)
— Iron Deposits (B5)	— Thin Muck Surface (C7)	— Stunted or Stressed Plants (D1)
— Foundation Visible on Aerial Imagery (B7)	— Other (Explain in Remarks)	— Geomorphic Position (D2)
— Sparsely Vegetated Concave Surface (B8)	— FAC-Neutral Test (D3)	— Shallow Aquifer (D3)
		— Microtopographic Relief (C4)
		— FAC-Neutral Test (D3)

Field Observations:

Surface Water Present? Yes   No X Depth (inches):  

Water Table Present? Yes   No X Depth (inches):  

Saturation Present? Yes   No X Depth (inches):  

(includes capillary fringe)

Wetland Hydrology Present? Yes   No X

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

Remarks:

No wetland hydrology was observed

SOIL Sampling Point: DP-011

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc	
0-10	10YR 5/6	90	7.5YR 4/6	10	C	W1	SIL
10-20	10YR 4/1	75	7.5YR 5/6	7.5	C	M	SIL
15-20	10YR 4/1	60	7.5YR 5/6	4.0	C	M	SIL

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pure Living, M=Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histolic (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 1488)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 1488)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 1488)	<input type="checkbox"/> Coast Prairie Retic (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 1488)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 1488)
<input type="checkbox"/> Sandy Clayey Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Mosaic Spodic (TA8) (MLRA 144A, 145, 1488)
<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> Root Parent Material (F21)
<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 1488)		<input type="checkbox"/> Other (Explain in Remarks)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
Type: AH  
Depth (inches): 10

Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: DP-011

Tree Stratum (Plot size: <u>30-ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
0 = Total Cover			
Shrub/Strub Stratum (Plot size: <u>15-ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lonicera hians</u>	15	Y	FAW
2.			
3.			
4.			
5.			
6.			
7.			
15 = Total Cover			
Herb Stratum (Plot size: <u>5-ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Juncus roemerianus</u>	70	Y	FAW
2. <u>Echinochloa crusgalli</u>	50	Y	FAW
3. <u>Sagittaria arifolia</u>	20	N	FAW
4. <u>Cirsium arvense</u>	10	N	FAW
5. <u>Epilobium hirsutum</u>	5	N	FAW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
195 = Total Cover			
Woody/Vine Stratum (Plot size: <u>30-ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
0 = Total Cover			

Dominate Test worksheet:  
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
Total Number of Dominant Species Across All Strata: 3 (B)  
Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (AB)

Prevalence Index worksheet:  
Total % Cover of: 0 Multiply by:  
OBL species x 1 = 0  
FACW species x 2 = 0  
FAC species x 3 = 0  
FACU species x 4 = 0  
LPL species x 5 = 0  
Column Totals: (A) 0 (B) 0  
Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:  
1 - Rapid Test for Hydrophytic Vegetation: X  
2 - Dominance Test is >50%  
3 - Prevalence Index is >3.0  
4 - Morphological Adaptations\* (Provide supporting data in Remarks or on a separate sheet)  
Problematic Hydrophytic Vegetation? (Explain) \_\_\_\_\_

Definitions of Vegetation Strata:  
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
Shrub/Strub - 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/Vine - 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.)

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 08/09/18  
 Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-011  
 Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: N/A  
 Landform (hilltop, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): -5  
 Subregion (LRR or MLRA): LRR R Loc: 47.435779 Long: -78.518662 Datum: NAD '83  
 Soil Map Unit Name: 606 Mopit silt loam 3to 8 percent slopes NWI classification: Not sampled  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N 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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If yes, optional Wetland Site ID: <u>FA-Wetland-010</u>			

Remarks: (Explain alternative procedures here or in a separate report.)  
PBM data point for FA-Wetland-010

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all that apply):	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (S6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Till Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)
<input checked="" 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 type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:  
 Surface Water Present? Yes  No  Depth (inches):       
 Water Table Present? Yes  No  Depth (inches):       
 Saturation Present? Yes  No  Depth (inches):       
 (includes capillary fringe)  
 Wetland Hydrology Present? Yes  No

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

Remarks:

**SOIL** Sampling Point: DP-012

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/6	100					SIL	
10-15	10YR 3/6	90	7.5YR 9/6	10	to		SIL	
15-20	10YR 3/6	90	7.5YR 9/6	10			SIL	Mix'd w/ gravel

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Massed Sand Grains, Location: PL=Pure Living, M=Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histic (A1)	<input type="checkbox"/> Polyvalue Below Surface (S3) (LRR R, MLRA 1498)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 1498)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S5) (LRR R, MLRA 1498)	<input type="checkbox"/> Coast Prairie Rudos (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Clayed Matrix (F2)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Deplicated Below Dark Surface (A11)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Deplicated Below Dark Surface (A11)	<input type="checkbox"/> Deplicated Matrix (F3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Deplicated Dark Surface (F7)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 1498)
<input type="checkbox"/> Sandy Clayed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Mosaic Spodic (TA8) (MLRA 144A, 145, 1498)
<input type="checkbox"/> Sandy Rudos (S5)		<input type="checkbox"/> Root Parent Material (F21)
<input type="checkbox"/> Sandy Rudos (S6)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stripped Matrix (S8)		<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 1498)		

Indicators of hydric vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
Type: NA  
Depth (inches): - Hydric Soil Present? Yes  No

Remarks:

**VEGETATION - Use scientific names of plants.** Sampling Point: DP-012

Tree Stratum (Plot size: 30-ft r.)

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Shrub/Straw Stratum (Plot size: 16-ft r.)

Shrub/Straw Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Viburnum prunifolium</i>	5	Y	FAU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Herb Stratum (Plot size: 5-ft c.)

Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Solidago canadensis</i>	25	Y	FAU
2. <i>Eubotrys americana</i>	20	Y	FAU
3. <i>Rubus allgoviensis</i>	10	N	FAU
4. <i>Solidago rigida</i>	10	N	FAU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: 30-ft r.)

Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Dominance Test worksheet:  
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
Total Number of Dominant Species Across All Strata: 3 (B)  
Percent of Dominant Species That Are OBL, FACW, or FAC: 55.5% (A/B)

Prevalence Index worksheet:  
Total % Cover of:  
OBL species x 1 =  
FACW species x 2 =  
FAC species x 3 =  
LPL species x 4 =  
Column Totals: (A) (B)  
Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:  
1 - Rapid Test for Hydrophytic Vegetation  
2 - Dominance Test is >50%  
3 - Prevalence Index is <3.0  
4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)  
Problematic Hydrophytic Vegetation? (Explain)

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.  
Shrub/straw - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
Bark - 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.)

**WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region**

Project/Site: Alle-Catt Wind Energy City/County: Catteraugus Sampling Date: 02/09/18  
 Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-012  
 Investigator(s): Emma Mrowka and Michael Bastardo Section, Township, Range: NIA  
 Landform (hillside, terrace, etc.): Flatlands Local relief (concave, convex, none): Convex Slope (%): 1-3  
 Subregion (LRR or MLRA): LRR R Loc: 42, 43, 2, 3 Long: -79.31, 82.13 Datum: NAD 83  
 Soil Map Unit Name: 608, 130, 511, 100, 110, 5, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Normal Circumstances present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N 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"/>
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.)  
 Updated data point for FA-Wetland-010

**HYDROLOGY**

Primary Indicators (minimum of one is required, check all that apply):  
 Surface Water (A1)  Water Stained Leaves (B0)  Surface Soil Cracks (B4)  
 High Water Table (A2)  Aquatic Fauna (B13)  Mosquito Larvae (B10)  
 Saturation (A3)  Mud Deposits (B15)  Dry-Season Water Table (C2)  
 Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Crayfish Burrows (C5)  
 Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Saturation Visible on Aerial Imagery (C9)  
 Drift Deposits (B3)  Presence of Reduced Iron (C4)  Stunted or Stressed Plants (D1)  
 Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  
 Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquifer (D3)  
 Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Microtopographic Relief (D4)  
 Sparsely Vegetated Concave Surface (B6)  FAC-Neutral Test (D6)

Field Observations:  
 Surface Water Present? Yes  No  Depth (inches): -  
 Water Table Present? Yes  No  Depth (inches): -  
 Saturation Present? Yes  No  Depth (inches): -  
 Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 No wetland hydrology was observed at the data point

SOIL Sampling Point: DP-016

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type		
0-15	10YR 3/6	100				S:L	
15-20	10YR 3/6	70	10YR 2/1	20	C M	S:L	
			10YR 4/6	10	C M		

Type: C=Concentration, D=Deposition, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pure Lining, M=Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (B9) (LRR RL, MLRA 1498)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 1498)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> MLRA 1498	<input type="checkbox"/> Coarse Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (B9) (LRR RL, MLRA 1498)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Polyvalue Below Surface (B9) (LRR K, L)
<input type="checkbox"/> Depleted Snow Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F8)	<input type="checkbox"/> Iron-Manganese Masses (F19) (LRR K, L, R)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 1498)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Mosaic Spodic (TAF6) (MLRA 144A, 145, 1498)
<input type="checkbox"/> Sandy Redox (S8)		<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7) (LRR RL, MLRA 1498)		<input type="checkbox"/> Other (Explain in Remarks)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
Type: NA  
Depth (inches): —

Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: DP-016

Tree Stratum (Plot size: <u>30-ft r.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>0</u>			
2. <u>0</u>			
3. <u>1</u>			
4. <u>0%</u>			
5. <u>0%</u>			
6. <u>0</u>			
7. <u>0</u>			

Shrub/Straw Stratum (Plot size: 15-ft r.)

1. <u>0</u>			
2. <u>0</u>			
3. <u>0</u>			
4. <u>0</u>			
5. <u>0</u>			
6. <u>0</u>			
7. <u>0</u>			

Herb Stratum (Plot size: 5-ft r.)

1. <u>95</u>	<u>Y</u>	<u>FW</u>
2. <u>15</u>	<u>N</u>	<u>FW</u>
3. <u>5</u>	<u>N</u>	<u>FW</u>
4. <u>0</u>		
5. <u>0</u>		
6. <u>0</u>		
7. <u>0</u>		

Woody Vine Stratum (Plot size: 30-ft r.)

1. <u>115</u>		
2. <u>0</u>		
3. <u>0</u>		
4. <u>0</u>		

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: 0 Multiply by:  
OBL species x 1 = 0  
FACW species x 2 = 0  
FAC species x 3 = 0  
FACU species x 4 = 0  
UPL species x 5 = 0  
Column Totals: (A) 0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:  
1 - Rapid Test for Hydrophytic Vegetation  
2 - Dominance Test is >50%  
3 - Prevalence Index is >3.0  
4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)  
- Problematic Hydrophytic Vegetation? (Explain)

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.  
Shrub/Straw - 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 Vine - 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.)  
Date point was taken in an active agricultural field

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Catt Wind Energy City/County: Allegany State: NY Sampling Date: 05/13/16  
Applicant/Owner: Invenery, LLC Section, Township, Range: N/A Sampling Point: DP-016  
Investigator(s): Emma Mrowka and Michael Bastedo  
Landform (hilltop, terrace, etc.): terrace Local relief (concave, convex, none): convex Slope (%): 1-3  
Subregion (LRR or MLRA): LRR R Lat: 42.07190 Long: -78.807261 Datum: NAD 83  
Soil Map Unit Name: COB Napi 5:11 loam, 3 to 9 percent slopes NWI classification: Not mapped  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
Are Vegetation N, Soil N, or Hydrology N 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"/>
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.)  
Wetland data point for Wetland-013  
Point taken in an active agricultural field

HYDROLOGY

Wetland Hydrology Indicators:

<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"/> Mud Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Color (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 (C4)
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C5)
<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"/> Irrigation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquifer (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  Depth (inches): —  
Water Table Present? Yes  No  Depth (inches): —  
Saturation Present? Yes  No  Depth (inches): —  
(includes capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks:  
No wetland hydrology was observed at the datapoint

SOIL Sampling Point: DP-017

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc		
0-6	10YR 5/2	75	7.5YR 5/6	25	C	M	S-L	
6-10	10YR 5/2	60	10YR 5/6	20	C	M	S-L	
10-16	10YR 5/2	50	10YR 5/6	20	C	M	S-L	
			7.5YR 4/6	30	C	M		

Type: C=Concentration, D=Depletion, R=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

— Histosol (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1498)
— Histic Epipedon (A2)	— MLRA 1498)	— Coarse Prairie Redox (A16) (LRR K, L, R)
— Black Histic (A3)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Mucky Mineral (F1) (LRR K, L)	— Dark Surface (S7) (LRR K, L, M)
— Stratified Layers (A5)	— Loamy Clayed Matrix (F2)	— Polyvalue Below Surface (S8) (LRR K, L)
— Depleted Below Dark Surface (A11)	— Depleted Matrix (F3)	— Thin Dark Surface (S9) (LRR K, L)
— Thick Dark Surface (A12)	— Redox Dark Surface (F8)	— Piedmont Floodplain Sols (F19) (MLRA 1498)
— Sandy Mucky Mineral (S1)	— Depleted Dark Surface (F7)	— Metic Spodic (TA6) (MLRA 144A, 145, 1498)
— Sandy Clayed Matrix (S4)	— Redox Depressions (F8)	— Red Parent Material (F21)
— Sandy Redox (S5)		— Very Shallow Dark Surface (TF12)
— Stripped Matrix (S6)		— Other (Explain in Remarks)
— Dark Surface (S7) (LRR R, MLRA 1498)		

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: NP

Depth (inches): —

Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: DP-017

Tree Stratum (Plot size: 30-ft x 10-ft)

Tree Stratum	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

0 = Total Cover

Shrub/Straw Stratum (Plot size: 15-ft x 15-ft)

Shrub/Straw Stratum	Absolute % Cover	Dominant Species	Indicator Status
1. <u>Solid rigida</u>	10	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Herb Stratum (Plot size: 5-ft x 5-ft)

Herb Stratum	Absolute % Cover	Dominant Species	Indicator Status
1. <u>Eriogonum maculatum</u>	95	Y	OBL
2. <u>Onoclea sensibilis</u>	10	N	FAC
3. <u>Anthriscus silvestris</u>	5	N	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

110 = Total Cover

Woody Vine Stratum (Plot size: 30-ft x 10-ft)

Woody Vine Stratum	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

0 = Total Cover

Hydrophytic Vegetation Present? Yes  No

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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Catt Wind Energy City/County: Allegheny State: NY Sampling Date: 09/15/19

Applicant/Owner: Invenery, LLC Section, Township, Range: N/A Sampling Point: DP-017

Investigator(s): Emma Mrowka and Michael Bastardo Local relief (concave, convex, none): Concave Slope (%): 1-2%

Landform (hillside, terrace, etc.): Terrace Lat: 42.894052 Long: -79.97147 Datum: NAD 83

Subregion (LRR or MLRA): LRR R Soil Map Unit Name: LoB Napi silt loam, 3 to 8 percent slopes NHI classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)

Are hydrophytic vegetation, soil, or hydrology significantly disturbed? Yes  No  (If no, explain in Remarks.)

Are "Normal Circumstances" present? Yes  No  (If no, explain any answers in Remarks.)

Are Vegetation N, Soil U, or Hydrology N, 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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

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

REM data point for FA Wetland - 013

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required, check all that apply)	Secondary Indicators (minimum of two required)
— Surface Water (A1)	— Surface Soil Cracks (B8)
— High Water Table (A2)	— Drainage Patterns (B10)
— Saturation (A3)	— Moss Trim Lines (B11)
— Water Marks (B1)	— Dry-Season Water Table (C2)
— Sediment Deposits (B2)	— Crayfish Burrows (C3)
— Drift Deposits (B3)	— Saturation Visible on Aerial Imagery (C9)
— Algal Mat or Crust (B4)	— Stunted or Stressed Plants (D1)
— Iron Deposits (B5)	— Geomorphic Position (D2)
— Inundation Visible on Aerial Imagery (B7)	— Shallow Aquifer (D3)
— Sparsely Vegetated Concave Surface (B8)	— Microtopographic Relief (D4)
	— 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):	—

Wetland Hydrology Present? Yes  No

Remarks:

SOIL Sampling Point: DP-012

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc <sup>1</sup>		
0-7	10YR 5/1	100	-	-	-	-	S-L	
7-10	10YR 4/1	90	7.5YR 5/4	10	C	M	S-L	

Type: C=Concentration, D=Dispersion, RM=Reduced Matrix, MS=Masked Sand Grains	Location: PL=Pore Lining, M=Matrix
Hydroic Soil Indicators:	Indicators for Problematic Hydroic Soils:
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Clayey Mastic (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Striped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 1488)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 1488) <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 1488) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) <input type="checkbox"/> Depleted Matrix (F2) <input type="checkbox"/> Depleted Dark Surface (F8) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Depleted Dark Surface (F9) <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 1488) <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) <input type="checkbox"/> Dark Surface (S7) (LRR K, L, M) <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 1488) <input type="checkbox"/> Mastic Spodic (F46) (MLRA 144A, 145, 148B) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: NA  
 Depth (inches): -

Hydroic Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: DP-015

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

0 = Total Cover

Sapling/Shrub Stratum (Plot size: 15-ft r.)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Viburnum dentatum</i>	10	Y	FAC
2. <i>Lonicera tatarica</i>	5	N	FACU
3. <i>Cornus pennsylvanica</i>	20	Y	FAC
4.			
5.			
6.			
7.			

35 = Total Cover

Herb Stratum (Plot size: 5-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Scirpus cespitosus</i>	30	Y	OBL
2. <i>Eupatorium perfoliatum</i>	20	Y	FACU
3. <i>Comarostaphylis cinnamomea</i>	5	N	FACU
4. <i>Oxalis sensibilis</i>	10	N	FACU
5. <i>Impatiens capensis</i>	10	N	FACU
6. <i>Euthyone maculatum</i>	15	Y	OBL
7. <i>Euthyone graminifolia</i>	5	N	FAC
8. <i>Salix petiolaris</i>	10	N	OBL
9.			
10.			
11.			
12.			

105 = Total Cover

Woody Vine Stratum (Plot size: 30-ft r.)  
 1. NA  
 2.  
 3.  
 4.

0 = Total Cover

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

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACU, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

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

**Prevalence Index worksheet:**

Total % Cover of: 0 = Total Cover

OBL species x 1 = 0  
 FACU species x 2 = 0  
 FAC species x 3 = 0  
 FACU species x 4 = 0  
 UPL species x 5 = 0

Column Totals: (A) 0 (B) 0

Prevalence Index = B/A = 0

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation: X 2 - Dominance Test is >50%  
 3 - Prevalence Index is >3.0  
 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation? (Explain)

Indicators of hydroic 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 vine** - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes  No

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Title: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 08/14/16  
 Applicant/Owner: Invenenergy, LLC State: NY Sampling Point: DP-015  
 Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: NA  
 Landform (hilllope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1-3  
 Subregion (LRR or MLRA): LRR R Lat: 42.355225 Long: -78.326774 Datum: NAD 83  
 Soil Map Unit Name: 1-*Udolls* and *Eluvonquels*, *Excessively* *bleached* NWI classification: Not mapped  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N 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"/>
Hydroic Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks: (Explain alternative procedures here or in a separate report.)  
PSS out a point for FA - Wetland - 015

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Mire Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Color (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)

**Field Observations:**

Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>-</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>3"</u>
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0"</u>

Wetland Hydrology Present? Yes  No

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

Remarks:

SOIL

Sampling Point: DP-019

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix	Redox Features	Texture	Remarks
Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	
0-5	10YR 3/2	100	SL	
5-8	10YR 4/4	100	SL	Rock refuse 1
8+				

Type: C=Concentration, D=Degradation, FM=Reduced Matrix, MS=Masked Sand Grains

Hydric Soil Indicators:

— Histosol (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1498)	— Indicators for Problematic Hydric Soils <sup>3</sup>
— Histic Epipedon (A2)	— MLRA 1498	— Coast Prairie Redox (A16) (LRR K, L, R)	
— Black Histic (A3)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
— Hydrogen Sulfide (A4)	— Loamy Mucky Mineral (F1) (LRR K, L)	— Dark Surface (S7) (LRR K, L, M)	
— Stratified Layers (A5)	— Loamy Gleyed Matrix (F2)	— Polyvalue Below Surface (S8) (LRR K, L)	
— Depleted Below Dark Surface (A11)	— Depleted Matrix (F3)	— Thin Dark Surface (S9) (LRR K, L)	
— Thick Dark Surface (A12)	— Redox Dark Surface (F6)	— Iron-Manganese Masses (F12) (LRR K, L, R)	
— Sandy Mucky Mineral (S1)	— Depleted Dark Surface (F7)	— Piedmont Floodplain Soils (F16) (MLRA 1498)	
— Sandy Gleyed Matrix (S4)	— Redox Depressions (F8)	— Mosaic Spodic (TA6) (MLRA 144A, 144, 1498)	
— Sandy Redox (S5)		— Red Parent Material (F21)	
— Striped Matrix (S6)		— Very Shallow Dark Surface (TF12)	
— Dark Surface (S7) (LRR R, MLRA 1498)		— Other (Explain in Remarks)	

<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
Type: Rock  
Depth (Inches): 8 in  
Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: DP-019

Taxa Stratum (Plot size)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Pinus serotina</i>	25	Y	FACU
2. <i>Rhus cathartica</i>	5	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

30 = Total Cover

Shrub/Straw Stratum (Plot size 15 ft x 15 ft)

Taxa Stratum (Plot size)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Pinus serotina</i>	5	N	FACU
2. <i>Lonicera tatarica</i>	70	Y	FACU
3. <i>Centaurea cyanocephala</i>	5	N	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

80 = Total Cover

Herb Stratum (Plot size 5 ft x 5 ft)

Taxa Stratum (Plot size)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Rubus allegheniensis</i>	15	N	FACU
2. <i>Lolium perenne</i>	70	Y	FACU
3. <i>Mithella repens</i>	30	Y	FACU
4. <i>Solidago rugosa</i>	20	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

135 = Total Cover

Woody Vine Stratum (Plot size 30 ft x 15 ft)

Taxa Stratum (Plot size)	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

0 = Total Cover

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

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of: 30

OBL species x 1 =

FACW species x 2 =

FAC species x 3 =

FACU species x 4 =

UPL species x 5 =

Column Totals: (A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is >3.0

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

Problematic Hydrophytic Vegetation? (Explain)

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 stem, 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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 08/14/18

Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-019

Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: N/A

Landform (hill slope, terrace, etc.): Hillside Local relief (concave, convex, none): Concave Slope (n): 5%

Subregion (LRR or MLRA): LRR R Lat: 42.955817 Long: -78.326492 Datum: NAD 83

Soil Map Unit Name: 1 - Willkumb & Fluvoquent, Equably Flooded NWI classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No

Are Vegetation H, Soil N, or Hydrology I 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  Is the Sampled Area within a Wetland? Yes  No

Hydric Soil Present? Yes  No

Wetland Hydrology Present? Yes  No  If yes, optional Wetland Site ID:

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

Upload data point for FA - Wetland-015

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply):

— Surface Water (A1) — Water-Stained Leaves (B9) — Surface Soil Cracks (B6)

— High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10)

— Saturation (A3) — Marl Deposits (B16) — Moss Trim Lines (B18)

— Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Dry-Season Water Table (C2)

— Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Crayfish Burrows (C8)

— Diat Deposits (B3) — Recent Iron Reduction in Tilled Soils (C4) — Saturation Visible on Aerial Imagery (C9)

— Algal Mat or Crust (B4) — Presence of Reduced Iron (C4) — Stunted or Stressed Plants (D1)

— Iron Deposits (B5) — Thin Muck Surface (C7) — Geomorphic Position (D2)

— Inundation Visible on Aerial Imagery (B7) — Other (Explain in Remarks) — Microtopographic Relief (D4)

— Sparsely Vegetated Concave Surface (B8) — FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes  No  Depth (inches): -

Water Table Present? Yes  No  Depth (inches): -

Saturation Present? Yes  No  Depth (inches): - Wetland Hydrology Present? Yes  No

(includes capillary fringe)

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

Remarks:

No wetland hydrology was observed at the data point

**SOIL** Sampling Point: DP-020

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Texture	Remarks
	Color ( moist)	%	Color ( moist)	%		
0-15	10YR 3/6	100			S: L	Rock ref. on 1
15+						

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pipe Lining, M=Matrix

Hydric Soil Indicators:

— Histosol (A1)	— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1488)
— Histic Epipedon (A2)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— Coast Prairie Redox (A16) (LRR K, L, R)
— Black Histic (A3)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Mucky Mineral (F1) (LRR K, L)	— Dark Surface (S7) (LRR K, L, M)
— Crystalline Layers (A5)	— Loamy Clayed Matrix (F2)	— Polyvalue Below Surface (S8) (LRR K, L)
— Depleted Below Dark Surface (A11)	— Depleted Matrix (F3)	— Thin Dark Surface (S9) (LRR K, L)
— Thick Dark Surface (A12)	— Redox Dark Surface (F6)	— Iron-Manganese Masses (F12) (LRR K, L, R)
— Sandy Mucky Mineral (S1)	— Depleted Dark Surface (F7)	— Piedmont Floodplain Sols (F19) (MLRA 1498)
— Sandy Clayed Matrix (S4)	— Redox Depressions (F8)	— Mastic Sols (F14) (MLRA 144A, 144, 1498)
— Sandy Redox (S5)		— Red Parent Material (F21)
— Stripped Matrix (S6)		— Very Shallow Dark Surface (TF12)
— Dark Surface (S7) (LRR R, MLRA 1498)		— Other (Explain in Remarks)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer III

Type: Rock

Depth (inches): 15 sp4

Hydric Soil Present? Yes  No

Remarks:

**VEGETATION - Use scientific names of plants.** Sampling Point: DP-020

Tree Stratum (Plot size: 30 ft)

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			
5.			
6.			
7.	0		= Total Cover

Shrub/Strawb Stratum (Plot size: 15 ft)

Shrub/Strawb Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			
5.			
6.			
7.	0		= Total Cover

Herb Stratum (Plot size: 5 ft)

Herb Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Solidago canadensis</u>	50	Y	FALW
2. <u>Phalaris arundinacea</u>	5	N	FALW
3. <u>Galium sp.</u>	30		
4. <u>Euthamia graminifolia</u>	60	Y	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115		= Total Cover

Woody Vine Stratum (Plot size: 30 ft)

Woody Vine Stratum	Absolute % Cover	Dominant Species?	Indicator Status
1. NA			
2.			
3.			
4.			
	0		= Total Cover

Hydrophytic Vegetation Present? Yes  No

Remarks: (Include photo numbers here or on a separate sheet.)  
Galium species not included in dominance calculations because not identified to species.

**WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region**

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 08/14/18

Applicant/Owner: Invenergy, LLC State: NY Sampling Point: DP-020

Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: NA

Landforms (hill slope, terrace, etc.): Hill slope Local relief (concave, convex, none): Convex Slope (%): 5

Subregion (LRR or MLRA): LRR R Loc: 42.492744 Long: -78.336321 Datum: NAD 83

Soil Map Unit Name: S9C X-histic clayey silt loam, thick, normal saline NW classification: Not sampled

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No

Are Vegetation N, Soil N, or Hydrology N 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"/>
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.)  
Upper data point for FA-Wetland-019  
Point taken in former agricultural field

**HYDROLOGY**

Wetland Hydrology Indicators: (minimum of one is required, check all that apply)

— Surface Water (A1)	— Water-Stamped Leaves (B6)	— Secondary Indicators (minimum of two required)
— High Water Table (A2)	— Aquatic Fauna (B13)	— Surface Soil Cracks (B8)
— Saturation (A3)	— Mud Deposits (B15)	— Drainage Patterns (B10)
— Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	— Moss Trim Lines (B16)
— Sediment Deposits (B2)	— Calcareous Rhizospheres on Living Roots (C3)	— Dry-Season Water Table (C2)
— Drift Deposits (B3)	— Presence of Reduced Iron (C4)	— Crayfish Burrows (C8)
— Algal Mat or Crust (B4)	— Recent Iron Reduction in Tilled Soils (C5)	— Saturation Visible on Aerial Imagery (C9)
— Iron Deposits (B5)	— Thin Muck Deposits (C7)	— Stunted or Stressed Plants (D1)
— Inundation Visible on Aerial Imagery (B7)	— Other (Explain in Remarks)	— Geomorphic Position (D2)
— Sparsely Vegetated Concave Surface (B8)		— Shallow Aquifer (D3)
		— Microtopographic Relief (D4)
		— FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes  No  Depth (inches): -

Water Table Present? Yes  No  Depth (inches): -

Saturation Present? Yes  No  Depth (inches): -

Wetland Hydrology Present? Yes  No

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

Remarks:  
No wet land hydrology was observed at the data point

**SOIL** Sampling Point: DP-021

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)	Matrix		Redox Features			Loc <sup>1</sup>	Texture	Remarks		
	Color (moist)	%	Color (moist)	%	Type <sup>2</sup>					
0-4	10YR 7/6	94	7.5YR 4/6	5	C	M	S.L			
4-16	10YR 4/1	75	7.5YR 4/6	75	C	M	S.L			
16+										Red Referral

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains	Location: PL=Pore Lining, M=Matrix
<b>Hydric Soil Indicators:</b>	
<ul style="list-style-type: none"> <li>— Histosol (A1)</li> <li>— Histic Epandion (A2)</li> <li>— Black Histic (A3)</li> <li>— Hydrogen Sulfide (A4)</li> <li>— Stratified Layers (A5)</li> <li>— Depleted Below Dark Surface (A11)</li> <li>— Thick Dark Surface (A12)</li> <li>— Sandy Mucky Mineral (S1)</li> <li>— Sandy Clayed Matrix (S4)</li> <li>— Sandy Redox (S5)</li> <li>— Stripped Matrix (S6)</li> <li>— Dark Surface (S7) (LRR R, MLRA 1498)</li> </ul>	<ul style="list-style-type: none"> <li>— Polyvalue Below Surface (S8) (LRR R, MLRA 1498)</li> <li>— Thin Dark Surface (S9) (LRR R, MLRA 1498)</li> <li>— Loamy Mucky Mineral (F1) (LRR K, L)</li> <li>— Loamy Clayed Matrix (F2)</li> <li>— Depleted Matrix (F3)</li> <li>— X Redox Dark Surface (F6)</li> <li>— Depleted Dark Surface (F7)</li> <li>— Redox Depressions (F8)</li> <li>— 2 cm Muck (A10) (LRR K, L, MLRA 1498)</li> <li>— Coarse Peatle Redox (A16) (LRR K, L, R)</li> <li>— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>— Dark Surface (S7) (LRR K, L, M)</li> <li>— Polyvalue Below Surface (S8) (LRR K, L)</li> <li>— Thin Dark Surface (S9) (LRR K, L)</li> <li>— Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>— Piedmont Floodplain Soils (F19) (MLRA 1498)</li> <li>— Mastic Spodic (TAD) (MLRA 144A, 145, 149B)</li> <li>— Red Parent Material (F21)</li> <li>— Very Shallow Dark Surface (TF12)</li> <li>— Other (Explain in Remarks)</li> </ul>

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: Red  
 Depth (inches): 16 inches  
 Hydric Soil Present? Yes  No

Remarks:

**VEGETATION - Use scientific names of plants.** Sampling Point: DP-021

Tree Stratum (Plot size: <u>30-ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>NA</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2.				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (AB)
4.				
5.				
6.				
7.				

Shrub/Straw Stratum (Plot size: <u>15-ft r</u> )	Total Cover
1. <u>NA</u>	<u>0</u> = Total Cover
2.	
3.	
4.	
5.	
6.	
7.	

Herb Stratum (Plot size: <u>5-ft r</u> )	Total Cover
1. <u>Syrphis cyrenius</u>	<u>30</u> Y OBL
2. <u>Solidago gigantea</u>	<u>45</u> Y FACW
3. <u>Euthamia graminifolia</u>	<u>30</u> Y FAC
4. <u>Solidago canadensis</u>	<u>20</u> N FACW
5. <u>Juniperus effusus</u>	<u>10</u> N OBL
6.	
7.	

Woody Vine Stratum (Plot size: 30-ft r)  
 1. NA  
 2.  
 3.  
 4.  
 Total Cover: 0

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

**WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region**

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus Sampling Date: 08/14  
 Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-021  
 Investigator(s): Emma Mrowka and Michael Bastedo Section, Township, Range: NA  
 Landforms (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 5  
 Subregion (LRR or MLRA): LRR R Lat: 42.447630 Long: -78.226914 Datum: NAD 83  
 Soil Map Unit Name: S7C - Yellowish clayey silt loam, 8 to 15 percent slopes NWI classification: Not mapped  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N 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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks: (Explain alternative procedures here or in a separate report.)  
PEM data point for FA-Wetland-018

**HYDROLOGY**

Wetland Hydrology Indicators:	Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<ul style="list-style-type: none"> <li>— Surface Water (A1)</li> <li>— High Water Table (A2)</li> <li>— Saturation (A3)</li> <li>— Water Marks (B1)</li> <li>— Sediment Deposits (B2)</li> <li>— Drift Deposits (B3)</li> <li>— Algal Mat or Crust (B4)</li> <li>— Iron Deposits (B5)</li> <li>— Inundation Visible on Aerial Imagery (B7)</li> <li>— Sparsely Vegetated Concave Surface (B8)</li> </ul>	<ul style="list-style-type: none"> <li>— Water-Stained Leaves (B9)</li> <li>— Aquatic Fauna (B13)</li> <li>— Presence of Reduced Iron (C4)</li> <li>— Recent Iron Reduction in Tilled Soils (C6)</li> <li>— Thin Muck Surface (C7)</li> <li>— Other (Explain in Remarks)</li> </ul>	<ul style="list-style-type: none"> <li>— Surface Soil Cracks (B6)</li> <li>— Drainage Patterns (B10)</li> <li>— Moss Trim Lines (B16)</li> <li>— Dry-Season Water Table (C2)</li> <li>— Crayfish Burrows (C4)</li> <li>— Saturation Visible on Aerial Imagery (C9)</li> <li>— Stunted or Stressed Plants (D1)</li> <li>— Geomorphic Position (D2)</li> <li>— Shallow Aquifer (D3)</li> <li>— Microtopographic Relief (D4)</li> <li>— FAC-Neutral Test (D5)</li> </ul>

Field Observations:  
 Surface Water Present? Yes  No  Depth (inches): -  
 Water Table Present? Yes  No  Depth (inches): -  
 Saturation Present? Yes  No  Depth (inches): -  
 Wetland Hydrology Present? Yes  No

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

Remarks:

**SOIL**

Sampling Point: DP-023

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix	Color (moist)	%	Color (moist)	%	Type	Loc	Texture	Remarks
0-5	10YR3/2	8D	7.5 YR 4/6	10	C	M		Silt	
5-15	10YR5/6	4D	7.5 YR 4/6	10	C	M		Silt	
			10YR4/1	10	C	M			

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pipe Lining, M=Matrix.

**Hydric Soil Indicators:**

— Histosol (A1)	— Polyvalue Below Surface (B6) (LRR R, MLRA 1498)	— 2 cm Muck (A10) (LRR K, L, MLRA 1498)
— Hells Epilepsion (A2)	— MLRA 1498)	— Coast Prairie Peat (A16) (LRR K, L, R)
— Black Histic (A3)	— Thin Dark Surface (S9) (LRR R, MLRA 1498)	— 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
— Hydrogen Sulfide (A4)	— Loamy Mucky Mineral (F1) (LRR K, L)	— Dark Surface (S7) (LRR K, L, M)
— Stratified Layers (A5)	— Loamy Gleyed Matrix (F2)	— Polyvalue Below Surface (B6) (LRR K, L)
— Depleted Below Dark Surface (A11)	— Depleted Matrix (F3)	— Thin Dark Surface (S9) (LRR K, L)
— Thick Dark Surface (A12)	— Radox Dark Surface (F6)	— Iron-Manganese Masses (F12) (LRR K, L, R)
— Sandy Mucky Mineral (S1)	— Depleted Dark Surface (F7)	— Piedmont Floodplain Soils (F18) (MLRA 1498)
— Sandy Gleyed Matrix (S4)	— Radox Depressions (F8)	— Mastic Spodic (F40) (MLRA 144A, 145, 1498)
— Sandy Radox (S5)		— Red Parent Material (F21)
— Stripped Matrix (S6)		— Very Shallow Dark Surface (F12)
— Dark Surface (S7) (LRR R, MLRA 1498)		— Other (Explain in Remarks)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Bank

Depth (inches): 15 in

Hydric Soil Present? Yes  No

Remarks:

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

Sampling Point: DP-023

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americana</u>	5	Y	Facu
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
5 = Total Cover			

**Shrub/Strawb Stratum (Plot size: 15-ft r)**

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lonicera tomentosa</u>	10	Y	Facu
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
10 = Total Cover			

**Herb Stratum (Plot size: 5-ft r)**

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Scirpus cyperinus</u>	25	Y	Obl
2. <u>Typha angustifolia</u>	20	Y	Obl
3. <u>Cyperus tenuiflorus</u>	10	N	Obl
4. <u>S. chrysanthus tuberosus</u>	10	N	Obl
5. <u>Mentha aquatica</u>	5	N	Obl
6. <u>Veronica hederifolia</u>	5	N	Obl
7. <u>Sparganium angustifolium</u>	5	N	Obl
8. <u>Echinochloa crusgalli</u>	5	N	Obl
9. <u>Solidago canadensis</u>	5	N	Obl
10.			
11.			
12.			
90 = Total Cover			

**Woody Vine Stratum (Plot size: 30-ft r)**

Tree Stratum (Plot size: 30-ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
D = Total Cover			

**Domestic Test Worksheet:**

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

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

Percent of Dominant Species That Are Obl, FACW, or FAC: 75% (A/B)

**Prevalence Index Worksheet:**

Total % Cover of: Maltese by:

Obl species x 1 = \_\_\_\_\_

FACW species x 2 = \_\_\_\_\_

FAC species x 3 = \_\_\_\_\_

FACU species x 4 = \_\_\_\_\_

UPL species x 5 = \_\_\_\_\_

Column Totals: (A) \_\_\_\_\_ (B) \_\_\_\_\_

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is <3.0

4 - Morphological Adaptations\* (Provide supporting data in Remarks or on a separate sheet)

\*Indicators of hydrophytic 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.

**Shrub/Strawb** - 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.)

**WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region**

Project/Site: Alle-Catt Wind Energy City/County: Cattaraugus State: NY Sampling Date: 08/15/18

Applicant/Owner: Invenery, LLC Section, Township, Range: N/A Sampling Point: DP-023

Investigator(s): Emma Mrowka and Michael Bastedo

Landform (hilllope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (ft.: 1:36)

Subregion (LRR or MLRA): LRR R Lat: 42.441241 Long: -78.295225 Datum: NAD 83

Soil Map (US Name): Go B, Aqpt: St 1, Inc., 3 to 8 percent slope NWI classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No

Are Vegetation N, Soil N, or Hydrology N 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"/>	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

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

PSS datapoint Rr FA-Wetland-020

**HYDROLOGY**

**Wetland Hydrology Indicators:**

**Primary Indicators (minimum of one is required; check all that apply):**

— Surface Water (A1)	— Water-Stained Leaves (B9)	— Surface Soil Cracks (B6)
— High Water Table (A2)	— Aquatic Fauna (B13)	— Drainage Patterns (B10)
— Saturation (A3)	— Mire Deposits (B16)	— Moss Trim Lines (B18)
— Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	— Dry-Season Water Table (C2)
— Sediment Deposits (B2)	— Oxidized Rhizospheres on Living Roots (C3)	— Crayfish Burrows (C4)
— Drift Deposits (B3)	— Presence of Reduced Iron (C4)	— Saturation Visible on Aerial Imagery (C5)
— Algal Mat or Crust (B4)	— Recent Iron Reduction in Tilled Soils (C6)	— Stunted or Stressed Plants (D1)
— Iron Deposits (B5)	— Thin Muck Surface (C7)	— Shallow Aquifer (D3)
— Pondation Visible on Aerial Imagery (B7)	— Other (Explain in Remarks)	— Microtopographic Relief (D4)
— Sparsely Vegetated Concave Surface (B8)	— FAC-Neutral Test (D6)	

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_

Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_

(Include capillary fringe)

Wetland Hydrology Present? Yes  No

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

Remarks:

SOIL

Sampling Point: DP-024

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Texture	Remarks
	Color (moist)	%	Color (moist)	%		
0-16	10 YR 4/3	100			SL	

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains, Location: PL=Pure Lining, M=Matrix.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S9) (LRR R, MLRA 1498)	<input type="checkbox"/> 2 cm Muck (A12) (LRR K, L, MLRA 1498)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> MLRA 1498)	<input type="checkbox"/> Coast Prairie Redox (A10) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 1498)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Thin Dark Surface (S5) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F5)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 1498)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Mastic Spodic (Y46) (MLRA 144A, 145, 1498)
<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> Peat Parent Material (F21)
<input type="checkbox"/> Shipped Matrix (S6)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 1498)		<input type="checkbox"/> Other (Explain in Remarks)

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
Type: NA  
Depth (inches): -  
Hydric Soil Present? Yes  No

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point DP-024

Tree Stratum (Plot size: 30-ft x 1)

Species	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Cornus amomum</i>	20	Y	FAC
2. <i>Mulberry</i>	20	-	NI

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:

Species	Total % Cover of	Multiply by:
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
LPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = A/B =

Herb Stratum (Plot size: 5-ft x 1)

Species	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Sida acuta</i>	60	Y	FAC
2. <i>Sida sp.</i>	30	Y	FAC
3. <i>Rubus allegheniensis</i>	10	N	FACU

Total Cover: 20 = Total Cover

Indicators of hydro 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.

Woody Vine Stratum (Plot size: 30-ft x 1)

Species	Absolute % Cover	Dominant Species?	Indicator Status
	100		

Total Cover: 0 = Total Cover

Hydrophytic Vegetation Present? Yes  No

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

Wild apple does not have an indicator status, so can't be used towards total cover percentage

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project: Alle-Catt Wind Energy City/County: Cattaraugus State: NY Sampling Date: 09/15/18

Applicant/Owner: Invenery, LLC State: NY Sampling Point: DP-024

Investigator(s): Emma Mrowka and Michael Bastido Section, Township, Range, N/A

Landform (hillside, terrace, etc.): Topography Local relief (concave, convex, none): Convex Slope (N/E/S):

Subregion (LRR or MLRA): LRR R Lat: 42.841265 Long: -78.325247 Datum: NAD 83

Soil Map Unit Name: 60B, Alpaishit (LRR R) 2 percent slopes NWI classification: Dsr (scraped)

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"/>
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.)

Upload data point for FA-Wetland - 020

HYDROLOGY

Wetland Hydrology Indicators:

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Soaked Lenses (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"/> Mat 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 checked="" 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 Aquifers (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> FAC-Neutral Test (D6)	<input type="checkbox"/> Microtopographic Relief (D4)

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): -

Wetland Hydrology Present? Yes  No

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

Remarks:

No Wetland hydrology was observed at the data point