



Upland TE- View facing East.



Upland TE Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 7 City/County: Catskill Sampling Date: 12/13/21
 Applicant/Owner: CHA State: NY Sampling Point: KC-2
 Investigator(s): Nick Dominic/Justin Williams Section, Township, Range: _____
 Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope %: _____
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 42.16532 Long: -73.91650 Datum: NAD83
 Soil Map Unit Name: _____ 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 No, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X 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>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Wetland KC	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u>X</u> Surface Water (A1) _____ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) <u>X</u> 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)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>2</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>5</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: KC-2

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Juniperus virginiana</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>20</u>	<u>=Total Cover</u>		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>130</u></td> <td>x 2 = <u>260</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>150</u> (A)</td> <td><u>340</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.27</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>130</u>	x 2 = <u>260</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>150</u> (A)	<u>340</u> (B)	Prevalence Index = B/A = <u>2.27</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>130</u>	x 2 = <u>260</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>150</u> (A)	<u>340</u> (B)																			
Prevalence Index = B/A = <u>2.27</u>																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>X</u> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Cornus sericea</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
	<u>40</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
1. <u>Onoclea sensibilis</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
2. <u>Phragmites australis</u>	<u>80</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>90</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30</u>)				Hydrophytic Vegetation Present? Yes <u> x </u> No <u> </u>																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

SOIL

Sampling Point	KC-2
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[illegible]



Wetland KC- View facing South

Phase 7

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 7, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-KC-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.164785°N Long: 73.916718°W Datum: NAD83
 Soil Map Unit Name: - NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, 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.) Upland Data Point for Wetland KC located on top of ridge, adjacent to railroad crossing.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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: No wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-KC-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Rhus typhina</u>	35	Yes	UPL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)														
2. <u>Ulmus americana</u>	10	Yes	FACW															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>45</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. <u>Lonicera morrowii</u>	15	Yes	FACU	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>115</u></td> <td>x 4 = <u>460</u></td> </tr> <tr> <td>UPL species <u>35</u></td> <td>x 5 = <u>175</u></td> </tr> <tr> <td>Column Totals: <u>160</u> (A)</td> <td><u>655</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4.09	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>115</u>	x 4 = <u>460</u>	UPL species <u>35</u>	x 5 = <u>175</u>	Column Totals: <u>160</u> (A)	<u>655</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>115</u>	x 4 = <u>460</u>																	
UPL species <u>35</u>	x 5 = <u>175</u>																	
Column Totals: <u>160</u> (A)	<u>655</u> (B)																	
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>15</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Ambrosia artemisiifolia</u>	45	Yes	FACU	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Alliaria petiolata</u>	25	Yes	FACU															
3. <u>Trifolium repens</u>	15	No	FACU															
4. <u>Rubus idaeus</u>	15	No	FACU															
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														
2. _____																		
3. _____																		
4. _____																		
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at the Data Point.																		

Upland

Upland

[illegible]²Location: PL=Pore Lining, M=Matrix.

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R ,
<input type="checkbox"/> Histic Epipedon (A2)	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"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B)	

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

Restrictive Layer (if observed): Type: <u>Compaction</u> Depth (inches): 3	Hydric Soil Present? Yes <u> </u> No <u>X</u>
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Remarks:
Could not dig past 3 inches due to gravel refusal, no hydric soils present at the Data Point.



Upland KC- View facing North.



Upland KC Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE- Package 7A - FS Area 13 - MP 226.3 City/County: Catskill/ Greene Sampling Date: 1/24/23
 Applicant/Owner: CHPE State: NY Sampling Point: P7A-13- Wet
 Investigator(s): K. Weiskotten Section, Township, Range: Town of Catskill
 Landform (hillside, terrace, etc.): Lake Plains Local relief (concave, convex, none): Concave Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 42° 09' 50.14"N Long: 73° 54' 59.86"W Datum:
 Soil Map Unit Name: Kingsbury and Rhinebeck NWI classification: PSS
 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>X</u> No <u></u> If yes, optional Wetland Site ID: <u></u>
Hydric Soil Present?	Yes <u>X</u> No <u></u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u></u>	
Remarks: (Explain alternative procedures here or in a separate report.) <div style="border: 1px solid red; padding: 5px; width: fit-content;">PSS portion of Wetland KC.</div>		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u></u> Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u></u> High Water Table (A2) <u></u> Aquatic Fauna (B13) <u>X</u> Saturation (A3) <u></u> Marl Deposits (B15) <u></u> Water Marks (B1) <u></u> Hydrogen Sulfide Odor (C1) <u></u> Sediment Deposits (B2) <u></u> Oxidized Rhizospheres on Living Roots (C3) <u></u> Drift Deposits (B3) <u></u> Presence of Reduced Iron (C4) <u></u> Algal Mat or Crust (B4) <u></u> Recent Iron Reduction in Tilled Soils (C6) <u></u> Iron Deposits (B5) <u></u> Thin Muck Surface (C7) <u></u> Inundation Visible on Aerial Imagery (B7) <u></u> Other (Explain in Remarks) <u></u> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <u></u> Surface Soil Cracks (B6) <u></u> Drainage Patterns (B10) <u></u> Moss Trim Lines (B16) <u></u> Dry-Season Water Table (C2) <u></u> Crayfish Burrows (C8) <u></u> Saturation Visible on Aerial Imagery (C9) <u></u> Stunted or Stressed Plants (D1) <u></u> Geomorphic Position (D2) <u></u> Shallow Aquitard (D3) <u></u> Microtopographic Relief (D4) <u>X</u> 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>X</u> No <u></u> Depth (inches): <u>10</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u></u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: P7A-13- Wet

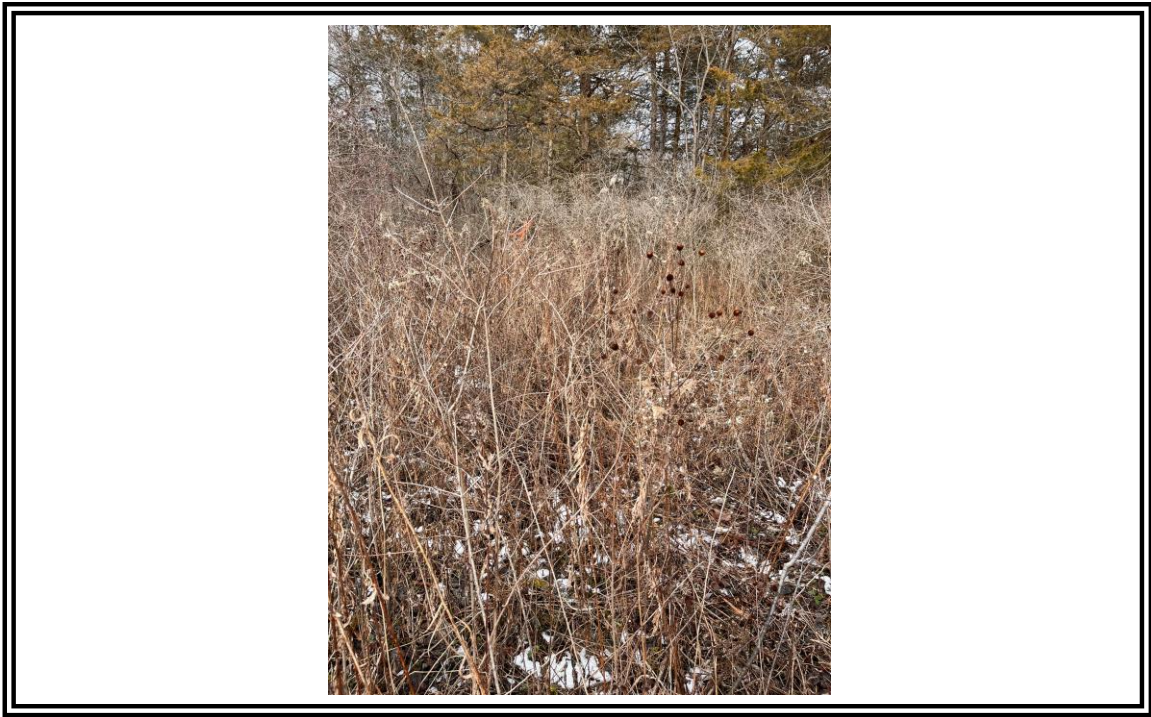
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	15	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>10</u> (A) Total Number of Dominant Species Across All Strata: <u>12</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.3%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply 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 = _____	
Total % Cover of:	Multiply 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 = _____																				
2. <u>Ulmus americana</u>	5	Yes	FACW																	
3. <u>Juniperus virginiana</u>	5	Yes	FACU																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	25	=Total Cover																		
Sapling/Shrub Stratum (Plot size: _____)																				
1. <u>Viburnum recognitum</u>	15	Yes	FAC	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Cornus amomum</u>	20	Yes	FACW																	
3. <u>Populus deltoides</u>	5	No	FAC																	
4. <u>Lonicera tatarica</u>	5	No	FACU																	
5. _____																				
6. _____																				
7. _____																				
	45	=Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Lythrum salicaria</u>	10	Yes	OBL	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 <u> X </u> No <u> </u>																
2. <u>Symphyotrichum novae-angliae</u>	5	Yes	FACW																	
3. <u>Solidago canadensis</u>	5	Yes	FACU																	
4. <u>Rudbeckia laciniata</u>	10	Yes	FACW																	
5. <u>Lysimachia nummularia</u>	5	Yes	FACW																	
6. <u>Poa palustris</u>	5	Yes	FACW																	
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	40	=Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. <u>Vitis riparia</u>	10	Yes	FAC																	
2. _____																				
3. _____																				
4. _____																				
	10	=Total Cover																		

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

SOIL

Sampling Point: P7A-13- Wet

[illegible]



Wetland GP7A - Area 13



Wetland GP7A - Area 13 - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE- Package 7A - FS Area 13 - MP 226.3 City/County: Catskill/ Greene Sampling Date: 1/24/23
 Applicant/Owner: CHPE State: NY Sampling Point: P7A-13-Up
 Investigator(s): K. Weiskotten Section, Township, Range: Town of Catskill
 Landform (hillside, terrace, etc.): Lake Plains Local relief (concave, convex, none): Concave Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 42° 09' 50.14"N Long: 73° 54' 59.86"W Datum:
 Soil Map Unit Name: Kingsbury and Rhinebeck NWI classification: None
 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></u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u></u> No <u>X</u> If yes, optional Wetland Site ID: <u></u>
Hydric Soil 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.) <div style="border: 1px solid red; padding: 5px; margin: 10px 0;"> Upland data point for PSS portion of Wetland KC. </div>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ 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)		<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <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:		

VEGETATION – Use scientific names of plants.

 Sampling Point: P7A-13-Up

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fraxinus americana</u>	25	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. <u>Juniperus virginiana</u>	25	Yes	FACU																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	50	=Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply 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 = _____	
Total % Cover of:	Multiply 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 = _____																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. <u>Rhamnus cathartica</u>	20	Yes	FAC																	
2. <u>Fraxinus americana</u>	5	No	FACU																	
3. <u>Lonicera tatarica</u>	15	Yes	FACU																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	40	=Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Fragaria virginiana</u>	5	Yes	FACU	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	5	=Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. <u>Toxicodendron radicans</u>	5	Yes	FAC	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.																
2. _____																				
3. _____																				
4. _____																				
	5	=Total Cover		Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																

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

SOIL

Sampling Point: P7A-13-Up

[illegible]



Upland GP7A – Area 13



Upland GP7A -Area 13 - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: August 24, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-GG
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.163531°N Long: 73.918053°W Datum: NAD83
 Soil Map Unit Name: KrB - Kingsbury and Rhinebeck soils, 3 to 8 percent slopes NWI classification: Not Mapped

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>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>GG</u>
Remarks: (Explain alternative procedures here or in a separate report.) PSS Wetland located in a depression within scrub shrub area at the bottom of a gentle hillslope.			

HYDROLOGY

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

VEGETATION – Use scientific names of plants.

Sampling Point: DP-GG

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: 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</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>160</u> (A)</td> <td><u>420</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.62	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>160</u> (A)	<u>420</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>80</u>	x 2 = <u>160</u>																	
FAC species <u>60</u>	x 3 = <u>180</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>160</u> (A)	<u>420</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. <u>Frangula alnus</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>															
2. <u>Cornus racemosa</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>60</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Equisetum pratense</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>															
2. <u>Phragmites australis</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>															
3. <u>Solidago canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>															
4. <u>Parthenocissus quinquefolia</u>	<u>10</u>	<u>No</u>	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____	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.														
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at the Data Point.																		

SOIL

Sampling Point: DP-GG

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input checked="" type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Wetland hydrology present at the Data Point.



PSS Wetland GG- View facing South.



PEM Wetland GG- Soils

SITE PHOTOGRAPHS

Segment 11 – Package 7A

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: August 24, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-GG-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.163795°N Long: 73.917972°W Datum: NAD83
 Soil Map Unit Name: KrB- Kingsbury and Rhinebeck soils, 3 to 8 percent slopes NWI classification: Not Mapped

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> </u> No <u>X</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.) Upland Data Point for Wetland GG located on edge of access road within a grass area.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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: No wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

Sampling Point: DP-GG-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>100</u></td> <td>x 4 = <u>400</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>400</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>400</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>100</u>	x 4 = <u>400</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>400</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Lolium perenne</u>	<u>90</u>	<u>Yes</u>	<u>FACU</u>															
2. <u>Trifolium repens</u>	<u>10</u>	<u>No</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	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.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No hydrophytic vegetation found at the Data Point.																		

|Upland

Sampling Point: DP-GG-

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 3

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
No hydric soils present at the Data Point, could not dig past 3 inches due to gravel refusal.



Upland GG- View facing North.



Upland GG- Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE- Package 7A - FS Area 14 - MP 226.6 City/County: Catskill/ Greene Sampling Date: 1/24/23
 Applicant/Owner: CHPE State: NY Sampling Point: P7A-14-Wet
 Investigator(s): K. Weiskotten Section, Township, Range: Town of Catskill
 Landform (hillside, terrace, etc.): Lake Plains Local relief (concave, convex, none): Concave Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 42°09'33.48"N Long: 73°55'05.15"W Datum:
 Soil Map Unit Name: Kingsbury and Rhinebeck 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 <u>X</u> No <u></u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u></u> If yes, optional Wetland Site ID: <u></u>
Hydric Soil Present?	Yes <u>X</u> No <u></u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u></u>	
Remarks: (Explain alternative procedures here or in a separate report.) <div style="border: 1px solid red; padding: 5px; margin: 10px 0;"> PEM portion of Wetland KC. </div>		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u>X</u> Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u></u> High Water Table (A2) <u></u> Aquatic Fauna (B13) <u>X</u> Saturation (A3) <u></u> Marl Deposits (B15) <u>X</u> Water Marks (B1) <u></u> Hydrogen Sulfide Odor (C1) <u></u> Sediment Deposits (B2) <u></u> Oxidized Rhizospheres on Living Roots (C3) <u></u> Drift Deposits (B3) <u></u> Presence of Reduced Iron (C4) <u></u> Algal Mat or Crust (B4) <u></u> Recent Iron Reduction in Tilled Soils (C6) <u></u> Iron Deposits (B5) <u></u> Thin Muck Surface (C7) <u></u> Inundation Visible on Aerial Imagery (B7) <u></u> Other (Explain in Remarks) <u></u> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <u></u> Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) <u></u> Moss Trim Lines (B16) <u></u> Dry-Season Water Table (C2) <u></u> Crayfish Burrows (C8) <u></u> Saturation Visible on Aerial Imagery (C9) <u></u> Stunted or Stressed Plants (D1) <u></u> Geomorphic Position (D2) <u></u> Shallow Aquitard (D3) <u></u> Microtopographic Relief (D4) <u></u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No <u></u> Depth (inches): <u>3</u> Water Table Present? Yes <u></u> No <u>X</u> Depth (inches): <u></u> Saturation Present? Yes <u>X</u> No <u></u> Depth (inches): <u>6</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u></u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: P7A-14-Wet

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fraxinus americana</u>	5	No	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>62.5%</u> (A/B)																
2. <u>Acer negundo</u>	5	No	FAC																	
3. <u>Juniperus virginiana</u>	10	Yes	FACU																	
4. <u>Populus deltoides</u>	10	Yes	FAC																	
5. _____																				
6. _____																				
7. _____																				
	30	=Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply 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 = _____	
Total % Cover of:	Multiply 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 = _____																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. <u>Cornus amomum</u>	5	Yes	FACW																	
2. <u>Acer negundo</u>	5	Yes	FAC																	
3. <u>Populus deltoides</u>	5	Yes	FAC																	
4. <u>Lonicera tatarica</u>	10	Yes	FACU																	
5. _____																				
6. _____																				
7. _____																				
	25	=Total Cover		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: _____)																				
1. <u>Lythrum salicaria</u>	10	No	OBL																	
2. _____																				
3. <u>Phragmites australis</u>	80	Yes	FACW																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	90	=Total Cover		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: _____)																				
1. <u>Celastrus orbiculatus</u>	5	Yes	UPL																	
2. _____																				
3. _____																				
4. _____																				
	5	=Total Cover		Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>																

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

SOIL

Sampling Point: P7A-14-Wet

[illegible]



Wetland GP7A - Area 14



Wetland GP7A - Area 14 - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE- Package 7A - FS Area 14 - MP 226.6 City/County: Catskill/ Greene Sampling Date: 1/24/23
 Applicant/Owner: CHPE State: NY Sampling Point: P7A-14-Up
 Investigator(s): K. Weiskotten Section, Township, Range: Town of Catskill
 Landform (hillside, terrace, etc.): Lake Plains Local relief (concave, convex, none): Concave Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 42° 09' 33.48"N Long: 73° 55' 05.15"W Datum:
 Soil Map Unit Name: Kingsbury and Rhinebeck NWI classification: None
 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></u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u></u> No <u>X</u> If yes, optional Wetland Site ID: <u></u>
Hydric Soil 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.) <div style="border: 2px solid red; padding: 5px; margin: 10px 0;"> Upland data point for PEM portion of Wetland KC. </div>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ 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)		<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <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:		

VEGETATION – Use scientific names of plants.

 Sampling Point: P7A-14-Up

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fraxinus americana</u>	10	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>14.3%</u> (A/B)																
2. <u>Populus deltoides</u>	10	Yes	FAC																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	20	=Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply 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 = _____	
Total % Cover of:	Multiply 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 = _____																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. <u>Lonicera tatarica</u>	20	Yes	FACU																	
2. <u>Elaeagnus umbellata</u>	15	Yes	UPL																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	35	=Total Cover		Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>Problematic Hydrophytic Vegetation</u> ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: _____)																				
1. <u>Artemisia absinthium</u>	25	Yes	UPL																	
2. <u>Phragmites australis</u>	10	No	FACW																	
3. <u>Solidago canadensis</u>	20	Yes	FACU																	
4. <u>Galium trifidum</u>	5	No	FACW																	
5. <u>Dipsacus fullonum</u>	5	No	FACU																	
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	65	=Total Cover		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: _____)																				
1. <u>Celastrus orbiculatus</u>	5	Yes	UPL																	
2. _____																				
3. _____																				
4. _____																				
	5	=Total Cover																		

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

SOIL

Sampling Point: P7A-14-Up

[illegible]



Upland GP7A – Area 14



Upland GP7A -Area 14 - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: August 24, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-GJ
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.158558°N Long: 73.918147°W Datum: NAD83
 Soil Map Unit Name: HvC- Hudson and Vergennes soils, 8 to 15 percent slopes NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, 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>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>GJ</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland located in a depression within a Phragmites stand, Wetland extends outside of the Project Study Limits.		

HYDROLOGY

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

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-GJ

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Populus deltoides</u>	15	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	15	= Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>245</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.13	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>115</u> (A)	<u>245</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>100</u>	x 2 = <u>200</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>115</u> (A)	<u>245</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	0	= Total Cover																
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Phragmites australis</u>	100	Yes	FACW	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
	100	= Total Cover																
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
	0	= Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at the Data Point.																		

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: DP-GJ

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input checked="" type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Dark gravel soils, no redox. Hydric soils present at the Data Point.



PEM Wetland GJ- View facing South.



PEM Wetland GJ- Soils

SITE PHOTOGRAPHS

Segment 11 – Package 7A

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: August 24, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-GJ-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.158649°N Long: 73.918290°W Datum: NAD83
 Soil Map Unit Name: HvC-Hudson and Vergennes soils, 8 to 15 percent slopes NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, 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> </u> No <u>X</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.) Upland Data Point located adjacent to access road.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u>X</u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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: No wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

Sampling Point: DP-GJ-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>35</u></td> <td>x 5 = <u>175</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>255</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4.63	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>35</u>	x 5 = <u>175</u>	Column Totals: <u>55</u> (A)	<u>255</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>35</u>	x 5 = <u>175</u>																	
Column Totals: <u>55</u> (A)	<u>255</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Daucus carota</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>															
2. <u>Centaurea stoebe</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>															
3. <u>Achillea millefolium</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	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.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>55</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No hydrophytic vegetation found at the Data Point.																		

SOIL

Sampling Point: DP-GJ-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 5

Hydric Soil Present? Yes No **X**

Remarks:

Remarks: Could not dig past 5 inches due to compaction of gravel, no hydric soils present at the Data Point.



Upland GJ- View facing North.



Upland GJ- Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 6, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-LC-PEM
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.153924°N Long: 73.920013°W Datum: NAD83
 Soil Map Unit Name: - Hudson and Vergennes silty clay loams, 15 to 25 percent slopes, severely eroded NWI classification: Not Mapped

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>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland located within a depression adjacent to access road.		If yes, optional Wetland Site ID: <u>LC</u>

HYDROLOGY

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

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-LC-PEM

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>165</u> (A)</td> <td><u>470</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.84	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>165</u> (A)	<u>470</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>65</u>	x 2 = <u>130</u>																	
FAC species <u>60</u>	x 3 = <u>180</u>																	
FACU species <u>40</u>	x 4 = <u>160</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>165</u> (A)	<u>470</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. <u>Frangula alnus</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>30</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Phragmites australis</u>	<u>65</u>	<u>Yes</u>	<u>FACW</u>															
2. <u>Ambrosia artemisiifolia</u>	<u>20</u>	<u>No</u>	<u>FACU</u>															
3. <u>Parthenocissus quinquefolia</u>	<u>20</u>	<u>No</u>	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____	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.														
<u>105</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. <u>Vitis riparia</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>30</u> = Total Cover																		
Hydrophytic Vegetation Present? <table style="float: right;"> <tr> <td>Yes</td> <td><u>X</u></td> <td>No</td> <td>_____</td> </tr> </table>				Yes	<u>X</u>	No	_____											
Yes	<u>X</u>	No	_____															
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at the Data Point.																		

SOIL

Sampling Point: DP-LC-PEM

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 6

Hydric Soil Present?	Yes	X	No
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Remarks:

Could not dig past 6 inches due to compaction, hydric soils present at the Data Point.



PEM Wetland LC- View facing South.



PEM Wetland LC- Soils

SITE PHOTOGRAPHS

Segment 11 – Package 7A

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 6, 2022

Applicant/Owner: CHA State: NY Sampling Point: DP-LC-PFO

Investigator(s): Tristen Peterson Section, Township, Range: Catskill

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR or MLRA): LRR R Lat: 42.154323°N Long: 73.919875°W Datum: NAD83

Soil Map Unit Name: - Hudson and Vergennes silty clay loams, 15 to 25 percent slopes, severely eroded NWI classification: Not Mapped

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>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		If yes, optional Wetland Site ID: <u>LC</u>

Remarks: (Explain alternative procedures here or in a separate report.)
PFO Wetland located within small, forested area adjacent to access road.

HYDROLOGY

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

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): (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:
Wetland hydrology present at the Data Point.

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-LC-PFO

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status																
1. <u>Juniperus virginiana</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>75</u> (A/B)															
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
		<u>15</u> = Total Cover																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																			
1. <u>Frangula alnus</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>250</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.77		Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>250</u> (B)
Total % Cover of:	Multiply by:																		
OBL species <u>10</u>	x 1 = <u>10</u>																		
FACW species <u>15</u>	x 2 = <u>30</u>																		
FAC species <u>50</u>	x 3 = <u>150</u>																		
FACU species <u>15</u>	x 4 = <u>60</u>																		
UPL species <u>0</u>	x 5 = <u>0</u>																		
Column Totals: <u>90</u> (A)	<u>250</u> (B)																		
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
		<u>20</u> = Total Cover																	
Herb Stratum (Plot size: 5 ft.)																			
1. <u>Symplocarpus foetidus</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.															
2. <u>Toxicodendron radicans</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																
3. <u>Phragmites australis</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
8. _____	_____	_____	_____																
9. _____	_____	_____	_____																
10. _____	_____	_____	_____																
11. _____	_____	_____	_____																
12. _____	_____	_____	_____																
		<u>55</u> = Total Cover																	
Woody Vine Stratum (Plot size: 30 ft.)																			
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____															
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
		<u>0</u> = Total Cover																	
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at the Data Point.																			

SOIL

Sampling Point: DP-LC-PFO

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input checked="" type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 5

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at the Data Point, could not dig past 5 inches due to compaction.



PFO Wetland LC- View facing North.



PFO Wetland LC- Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 6, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-LC-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.154343°N Long: 73.919994°W Datum: NAD83
 Soil Map Unit Name: - Hudson and Vergennes silty clay loams, 15 to 25 percent slopes, severely eroded NWI classification: Not Mapped
 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> </u> No <u>X</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.)
 Upland Data Point for PFO Wetland LC located within open shrub area adjacent to the access road.

HYDROLOGY

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

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 No wetland hydrology present at the Data Point.

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-LC-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>100</u></td> <td>x 4 = <u>400</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>400</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>400</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>100</u>	x 4 = <u>400</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>400</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Ambrosia artemisiifolia</u>	<u>90</u>	<u>Yes</u>	<u>FACU</u>															
2. <u>Solidago canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	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.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No hydrophytic vegetation found at the Data Point.																		

SOIL

Sampling Point: DP-LC-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 6

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
Could not dig past 6 inches due to compaction, no hydric soils present at the Data Point.



Upland LC- View facing North.



Upland LC Soils

SITE PHOTOGRAPHS

Segment 11 – Package 7A

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 6, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-MC
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.152129°N Long: 73.920631°W Datum: NAD83
 Soil Map Unit Name: - Hudson and Vergennes soils, 3 to 8 percent slopes NWI classification: Not Mapped

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>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>MC</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland located within a depression adjacent to access road, Wetland MC is in a Phragmites stand.		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u>X</u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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>X</u> No <u> </u> Depth (inches): <u>8</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-MC

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>85</u></td> <td>x 2 = <u>170</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>230</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.3	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>85</u>	x 2 = <u>170</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>230</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>85</u>	x 2 = <u>170</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>230</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Phragmites australis</u>	<u>85</u>	<u>Yes</u>	<u>FACW</u>															
2. <u>Solidago canadensis</u>	<u>15</u>	<u>No</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at the Data Point.				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: DP-MC

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (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) (**LRR R, MLRA 149B**)

- ☐ Polyvalue Below Surface (S8) (**LRR R**, **MLRA 149B**)
- ☐ Thin Dark Surface (S9) (**LRR R**, **MLRA 149B**)
- ☐ Loamy Mucky Mineral (F1) (**LRR K**, **L**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☒ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at the Data Point.



PEM Wetland MC- View facing South.



PEM Wetland MC- Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 6, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-MC-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 2
 Subregion (LRR or MLRA): LRR R Lat: 42.152143°N Long: 73.920515°W Datum: NAD83
 Soil Map Unit Name: - Hudson and Vergennes soils, 3 to 8 percent slopes NWI classification: Not Mapped

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> </u> No <u>X</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.) Upland Data Point for Wetland MC located adjacent to access road and grass area.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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: No wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-MC-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>100</u></td> <td>x 4 = <u>400</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>400</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>400</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>100</u>	x 4 = <u>400</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>400</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Lolium perenne</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>															
2. <u>Trifolium repens</u>	<u>15</u>	<u>No</u>	<u>FACU</u>															
3. <u>Dactylis glomerata</u>	<u>15</u>	<u>No</u>	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	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.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No hydrophytic vegetation found at the Data Point.																		

|Upland

Sampling Point: DP-MC-

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
Could not dig past 2 inches due to compaction, no hydric soils present at the Data Point.



Upland MC- View facing North



Upland MC Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 9, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-O1
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.151069°N Long: 73.920750°W Datum: NAD83
 Soil Map Unit Name: - NWI classification: Not Mapped

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>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>O1</u>
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland located within a depression adjacent to bridge, Wetland is within a phragmites stand and shrub area.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>7</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>2</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-01

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>275</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.2	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</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>125</u> (A)	<u>275</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>100</u>	x 2 = <u>200</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>125</u> (A)	<u>275</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. <u>Cornus racemosa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>15</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Phragmites australis</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	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.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. <u>Vitis riparia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>10</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
Hydrophytic vegetation found at the Data Point.																		

SOIL

Sampling Point: DP-O1

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input checked="" type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at the Data Point.



PEM Wetland O1- View facing North.



PEM Wetland O1- Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 10, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-O1-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.151155°N Long: 73.920774°W Datum: NAD83
 Soil Map Unit Name: - NWI classification: Not Mapped

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> </u> No <u>X</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.) Upland Data Point for Wetland O1 located adjacent to an open area adjacent to road shoulder.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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: No wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-O1-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>40</u> (A)</td> <td><u>160</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>40</u> (A)	<u>160</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>40</u>	x 4 = <u>160</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>40</u> (A)	<u>160</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Poa pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	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.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>40</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at the Data Point.																		

SOIL

Sampling Point: DP-O1-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 8

Hydric Soil Present? Yes No **X**

Remarks:

Remarks: Could not dig past 8 inches due to rock refusal, dark soils due to area adjacent to road, no hydric soils present at the Data Point.



Upland O1- View facing North.



Upland O1 Soils

SITE PHOTOGRAPHS

Segment 11 – Package 7A

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 10, 2022
 Applicant/Owner: CHA State: NY Sampling Point: P-1
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.145764°N Long: 73.913271°W Datum: NAD83
 Soil Map Unit Name: - NWI classification: Not Mapped

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>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		If yes, optional Wetland Site ID: <u>F</u>
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland located within a depression adjacent to Alpha Road.			

HYDROLOGY

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

VEGETATION – Use scientific names of plants.

Sampling Point: **P-1**

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>75</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
0 = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. <u>Cornus racemosa</u>	20	Yes	FAC	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>380</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.71	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>140</u> (A)	<u>380</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>70</u>	x 2 = <u>140</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>140</u> (A)	<u>380</u> (B)																	
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
20 = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Phragmites australis</u>	70	Yes	FACW	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u> X </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Ambrosia artemisiifolia</u>	20	Yes	FACU															
3. <u>Parthenocissus quinquefolia</u>	10	No	FACU															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
100 = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. <u>Vitis riparia</u>	20	Yes	FAC	Hydrophytic Vegetation Present? Yes <u> X </u> No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
20 = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
Hydrophytic vegetation found at the Data Point.																		

SOIL

Sampling Point:

P-1

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (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) (**LRR R, MLRA 149B**)

- ☐ Polyvalue Below Surface (S8) (**LRR R**,
MLRA 149B)
- ☐ Thin Dark Surface (S9) (**LRR R**, **MLRA 149B**)
- ☐ Loamy Mucky Mineral (F1) (**LRR K**, **L**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☒ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at the Data Point.



PEM Wetland P1- View facing North.



PEM Wetland P-1- Soils

SITE PHOTOGRAPHS

Segment 11 – Package 7A

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 10, 2022
 Applicant/Owner: CHA State: NY Sampling Point: -Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.145712°N Long: 73.913309°W Datum: NAD83
 Soil Map Unit Name: - NWI classification: Not Mapped

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> </u> No <u>X</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.) Upland Data Point for Wetland located along the road shoulder and shrub area.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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: No wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

Sampling Point: DP--Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <div style="display: flex; justify-content: space-between;"> Total % Cover of: Multiply by: </div> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>100</u> x 4 = <u>400</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>400</u> (B) Prevalence Index = B/A = 4
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Ambrosia artemisiifolia</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Poa pratensis</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Trifolium repens</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
4. <u>Solidago canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at the Data Point.				Hydrophytic Vegetation Present? <div style="display: flex; align-items: center; gap: 10px;"> Yes <u> </u> No <u>X</u> </div>

SOIL

Sampling Point: DP-F-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 13

Hydric Soil Present? Yes No **X**

Remarks:

Remarks: No hydric soils present at the Data Point, dark soils found at the Data Point due to being adjacent to the shoulder of road.



Upland P1- View facing North



Upland P-1 Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 10, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-E
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.145470°N Long: 73.912548°W Datum: NAD83
 Soil Map Unit Name: - NWI classification: Not Mapped

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>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>E</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland located within a depression in Phragmites stand adjacent to an open grass area.		

HYDROLOGY

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

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-E

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>200</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>200</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>100</u>	x 2 = <u>200</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>200</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Phragmites australis</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at the Data Point.				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: DP-E

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (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) (**LRR R, MLRA 149B**)

- ☐ Polyvalue Below Surface (S8) (**LRR R**, **MLRA 149B**)
- ☐ Thin Dark Surface (S9) (**LRR R**, **MLRA 149B**)
- ☐ Loamy Mucky Mineral (F1) (**LRR K**, **L**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at the Data Point.



PEM Wetland E- View facing North.



PEM Wetland E- Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Greene Sampling Date: June 10, 2022
 Applicant/Owner: CHA State: NY Sampling Point: DP-E-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Catskill
 Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.145440°N Long: 73.912560°W Datum: NAD83
 Soil Map Unit Name: - NWI classification: Not Mapped

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> </u> No <u>X</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.) Upland Data Point for Wetland E located within open grass area			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> 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: No wetland hydrology present at the Data Point.		

VEGETATION – Use scientific names of plants.

Sampling Point: DP-E-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status																
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)															
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>100</u></td> <td>x 4 = <u>400</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>400</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4		Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>400</u> (B)
Total % Cover of:	Multiply by:																		
OBL species <u>0</u>	x 1 = <u>0</u>																		
FACW species <u>0</u>	x 2 = <u>0</u>																		
FAC species <u>0</u>	x 3 = <u>0</u>																		
FACU species <u>100</u>	x 4 = <u>400</u>																		
UPL species <u>0</u>	x 5 = <u>0</u>																		
Column Totals: <u>100</u> (A)	<u>400</u> (B)																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.															
1. _____	_____	_____	_____																
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
<u>0</u> = Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes ___ No <u>X</u>															
Herb Stratum (Plot size: 5 ft.)																			
1. <u>Poa pratensis</u>	<u>80</u>	<u>Yes</u>	<u>FACU</u>																
2. <u>Trifolium repens</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
8. _____	_____	_____	_____																
9. _____	_____	_____	_____																
10. _____	_____	_____	_____																
<u>100</u> = Total Cover																			
Woody Vine Stratum (Plot size: 30 ft.)																			
1. _____	_____	_____	_____																
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
<u>0</u> = Total Cover																			
Remarks: (Include photo numbers here or on a separate sheet.)																			
No hydrophytic vegetation found at the Data Point.																			

SOIL

Sampling Point: DP-E-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | 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"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 6

Hydric Soil Present? Yes No **X**

Remarks:

Remarks: Could not dig past 6 inches due to gravel refusal, no hydric soils present at the Data Point.



Upland E- View facing South.



Upland E Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Wet_7A-Y-7

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.14481°N Long: -73.90852°W Datum: WGS84

Soil Map Unit Name: Mh - Medisaprists-Hydraquents, tidal marsh NWI classification: PEM1

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 _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag 7A-Y-7</u>
Remarks: (Explain alternative procedures here or in a separate report.) Palustrine emergent marsh dominated by common reed.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<u>_____</u> Surface Water (A1) <u>_____</u> Water-Stained Leaves (B9) <u><u>X</u></u> <u>_____</u> High Water Table (A2) <u>_____</u> Aquatic Fauna (B13) <u><u>X</u></u> <u>_____</u> Saturation (A3) <u>_____</u> Marl Deposits (B15) <u>_____</u> Water Marks (B1) <u><u>X</u></u> <u>_____</u> Hydrogen Sulfide Odor (C1) <u>_____</u> Sediment Deposits (B2) <u>_____</u> Oxidized Rhizospheres on Living Roots (C3) <u>_____</u> Drift Deposits (B3) <u>_____</u> Presence of Reduced Iron (C4) <u>_____</u> Algal Mat or Crust (B4) <u>_____</u> Recent Iron Reduction in Tilled Soils (C6) <u>_____</u> Iron Deposits (B5) <u>_____</u> Thin Muck Surface (C7) <u>_____</u> Inundation Visible on Aerial Imagery (B7) <u>_____</u> Other (Explain in Remarks) <u>_____</u> Sparsely Vegetated Concave Surface (B8)		<u>_____</u> Surface Soil Cracks (B6) <u>_____</u> Drainage Patterns (B10) <u>_____</u> Moss Trim Lines (B16) <u>_____</u> Dry-Season Water Table (C2) <u>_____</u> Crayfish Burrows (C8) <u>_____</u> Saturation Visible on Aerial Imagery (C9) <u>_____</u> Stunted or Stressed Plants (D1) <u><u>X</u></u> <u>_____</u> Geomorphic Position (D2) <u>_____</u> Shallow Aquitard (D3) <u>_____</u> Microtopographic Relief (D4) <u><u>X</u></u> <u>_____</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>5</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: Wet_7A-Y-7

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fraxinus pennsylvanica</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.3%</u> (A/B)																
2. <u>Populus deltoides</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>15</u>	=Total Cover	Prevalence Index worksheet: <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>115</u></td> <td>x 2 = <u>230</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>265</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.12</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>115</u>	x 2 = <u>230</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>265</u> (B)	Prevalence Index = B/A = <u>2.12</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>115</u>	x 2 = <u>230</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>125</u> (A)	<u>265</u> (B)																			
Prevalence Index = B/A = <u>2.12</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Fraxinus pennsylvanica</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>5</u>	=Total Cover	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>X</u> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phragmites australis</u>	<u>70</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Lysimachia nummularia</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Pilea pumila</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Impatiens capensis</u>	<u>3</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Bidens frondosa</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>100</u>	=Total Cover	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u>Parthenocissus quinquefolia</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>5</u>	=Total Cover	Hydrophytic Vegetation Present? Yes <u>X</u> No _____																

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

SOIL

Sampling Point: Wet_7A-Y-7

[illegible]



Wetland 7A-Y - View facing north



Wetland 7A-Y - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Wet_7A-Y-2

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range: _____

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2

Subregion (LRR or MLRA): LRR R Lat: 42.14504°N Long: -73.90798°W Datum: WGS84

Soil Map Unit Name: Ur - Udorthents, loamy NWI classification: PFO1

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 _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag 7A-Y-2</u>
Remarks: (Explain alternative procedures here or in a separate report.) Palustrine forested wetland. Hardwood swamp.	

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"/> High Water Table (A2) <input 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 checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> 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 <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: Wet_7A-Y-2

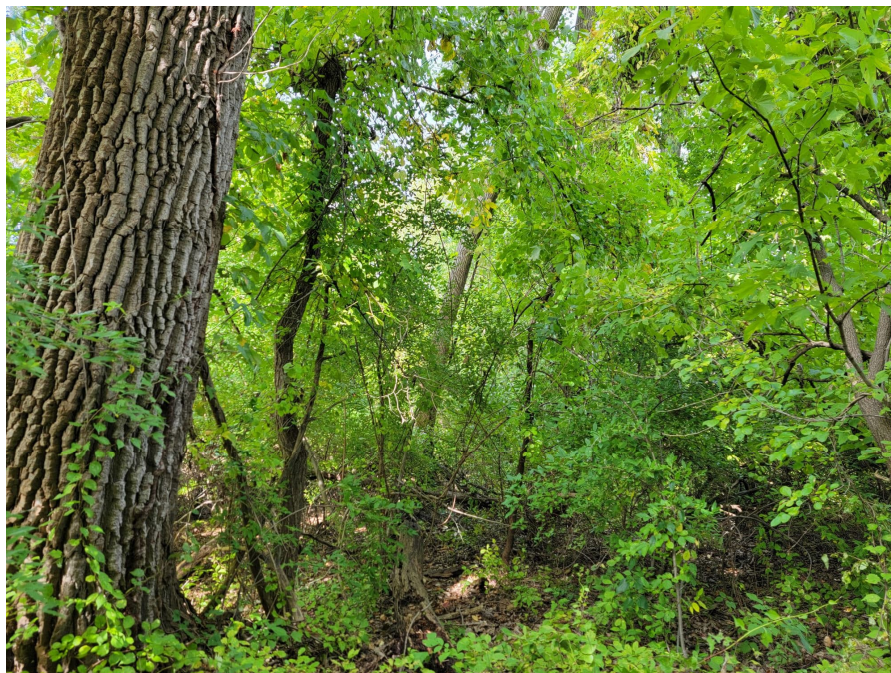
Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>55</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.4%</u> (A/B)																
2. <u>Acer negundo</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>80</u>	=Total Cover	Prevalence Index worksheet: <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>100</u></td> <td>x 3 = <u>300</u></td> </tr> <tr> <td>FACU species <u>18</u></td> <td>x 4 = <u>72</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>183</u> (A)</td> <td><u>562</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.07</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>100</u>	x 3 = <u>300</u>	FACU species <u>18</u>	x 4 = <u>72</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>183</u> (A)	<u>562</u> (B)	Prevalence Index = B/A = <u>3.07</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>45</u>	x 2 = <u>90</u>																			
FAC species <u>100</u>	x 3 = <u>300</u>																			
FACU species <u>18</u>	x 4 = <u>72</u>																			
UPL species <u>20</u>	x 5 = <u>100</u>																			
Column Totals: <u>183</u> (A)	<u>562</u> (B)																			
Prevalence Index = B/A = <u>3.07</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Viburnum cassinoides</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>35</u>	=Total Cover	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Artemisia vulgaris</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
2. <u>Fraxinus pennsylvanica</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Parthenocissus quinquefolia</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Toxicodendron radicans</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Celastrus orbiculatus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>45</u>	=Total Cover	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u>Parthenocissus quinquefolia</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Celastrus orbiculatus</u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>23</u>	=Total Cover	Hydrophytic Vegetation Present? Yes <u>X</u> No _____																

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

SOIL

Sampling Point: Wet_7A-Y-2

[illegible]



Wetland 7A-Y - View facing north



Wetland 7A-Y - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Upl_7A-Y

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.14448°N Long: -73.90804°W Datum: WGS84

Soil Map Unit Name: Ur - Udorthents, loamy NWI classification: NA

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.

<table style="width: 100%;"> <tr> <td style="width: 30%;">Hydrophytic Vegetation Present?</td> <td style="width: 10%;">Yes _____</td> <td style="width: 10%;">No <u>X</u></td> </tr> <tr> <td>Hydric Soil Present?</td> <td>Yes _____</td> <td>No <u>X</u></td> </tr> <tr> <td>Wetland Hydrology Present?</td> <td>Yes _____</td> <td>No <u>X</u></td> </tr> </table>	Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Hydric Soil Present?	Yes _____	No <u>X</u>	Wetland Hydrology Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>								
Hydric Soil Present?	Yes _____	No <u>X</u>								
Wetland Hydrology Present?	Yes _____	No <u>X</u>								
Remarks: (Explain alternative procedures here or in a separate report.) Fill area adjacent to wetland.										

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Marl Deposits (B15)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td> <td></td> </tr> </table>		<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)		<u>Secondary Indicators (minimum of two required)</u> <table style="width: 100%;"> <tr><td><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td><input type="checkbox"/> Drainage Patterns (B10)</td></tr> <tr><td><input type="checkbox"/> Moss Trim Lines (B16)</td></tr> <tr><td><input type="checkbox"/> Dry-Season Water Table (C2)</td></tr> <tr><td><input type="checkbox"/> Crayfish Burrows (C8)</td></tr> <tr><td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td><input type="checkbox"/> Stunted or Stressed Plants (D1)</td></tr> <tr><td><input type="checkbox"/> Geomorphic Position (D2)</td></tr> <tr><td><input type="checkbox"/> Shallow Aquitard (D3)</td></tr> <tr><td><input type="checkbox"/> Microtopographic Relief (D4)</td></tr> <tr><td><input type="checkbox"/> FAC-Neutral Test (D5)</td></tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Microtopographic Relief (D4)	<input type="checkbox"/> FAC-Neutral Test (D5)
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<input type="checkbox"/> 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 <u>X</u>																																
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																																	
Remarks:																																	

VEGETATION – Use scientific names of plants.

Sampling Point: Upl_7A-Y

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>40</u></td> <td>x 5 = <u>200</u></td> </tr> <tr> <td>Column Totals: <u>60</u> (A)</td> <td><u>280</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.67</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>40</u>	x 5 = <u>200</u>	Column Totals: <u>60</u> (A)	<u>280</u> (B)	Prevalence Index = B/A = <u>4.67</u>	
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>																			
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Column Totals: <u>60</u> (A)	<u>280</u> (B)																			
Prevalence Index = B/A = <u>4.67</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Juniperus virginiana</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Centaurea stoebe</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																	
2. <u>Solidago juncea</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Plantago lanceolata</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

Hydrophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation
2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.0¹
4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes No X

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

SOIL

Sampling Point: Upl_7A-Y

[illegible]



Upland 7A-Y - View facing southeast



Upland 7A-Y - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Wet_7A-Z-5

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range: _____

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2

Subregion (LRR or MLRA): LRR R Lat: 42.14353°N Long: -73.90843°W Datum: WGS84

Soil Map Unit Name: Mh - Medisaprists-Hydraquents, tidal marsh NWI classification: PSS1

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 _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag 7A-Z-5</u>
Remarks: (Explain alternative procedures here or in a separate report.) Palustrine scrub shrub wetland.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
_____ Surface Water (A1) <u>X</u> 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) <u>X</u> Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		_____ Surface Soil Cracks (B6) <u>X</u> 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> 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 <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Adjacent to the Hudson River.		

VEGETATION – Use scientific names of plants.

 Sampling Point: Wet_7A-Z-5

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)																
2. <u>Salix alba</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>15</u>	=Total Cover	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>88</u></td> <td>x 2 = <u>176</u></td> </tr> <tr> <td>FAC species <u>68</u></td> <td>x 3 = <u>204</u></td> </tr> <tr> <td>FACU species <u>8</u></td> <td>x 4 = <u>32</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>164</u> (A)</td> <td><u>412</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.51</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>88</u>	x 2 = <u>176</u>	FAC species <u>68</u>	x 3 = <u>204</u>	FACU species <u>8</u>	x 4 = <u>32</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>164</u> (A)	<u>412</u> (B)	Prevalence Index = B/A = <u>2.51</u>	
Total % Cover of:	Multiply by:																			
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FACU species <u>8</u>	x 4 = <u>32</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>164</u> (A)	<u>412</u> (B)																			
Prevalence Index = B/A = <u>2.51</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Rhamnus cathartica</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Viburnum cassinoides</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>70</u>	=Total Cover	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>X</u> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Carex intumescens</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Fraxinus pennsylvanica</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Lysimachia nummularia</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Acer rubrum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Toxicodendron radicans</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Equisetum arvense</u>	<u>3</u>	<u>No</u>	<u>FAC</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>71</u>	=Total Cover	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u>Celastrus orbiculatus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Parthenocissus quinquefolia</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>8</u>	=Total Cover																	
Hydrophytic Vegetation Present? Yes <u>X</u> No _____																				

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

SOIL

Sampling Point: Wet_7A-Z-5

[illegible]



Wetland 7A-Z - View facing west



Wetland 7A-Z - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Upl_7A-Z-5

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range: _____

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 10

Subregion (LRR or MLRA): LRR R Lat: 42.14358°N Long: --73.90819°W Datum: WGS84

Soil Map Unit Name: Mh - Medisaprists-Hydraquents, tidal marsh NWI classification: NA

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> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Successional shrubland / hillslope.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
_____ 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)	_____ Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks)	_____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <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 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: Upl_7A-Z-5

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>75</u></td> <td>x 3 = <u>225</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>315</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.15</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>75</u>	x 3 = <u>225</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>315</u> (B)	Prevalence Index = B/A = <u>3.15</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>75</u>	x 3 = <u>225</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>315</u> (B)																			
Prevalence Index = B/A = <u>3.15</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Rhamnus cathartica</u>	<u>75</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Viburnum cassinoides</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u>Vitis aestivalis</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Celastrus orbiculatus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Hydrophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation
2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.0¹
4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes No X

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

SOIL

Sampling Point: Upl_7A-Z-5

[illegible]



Upland 7A-Z - View facing east



Upland 7A-Z - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Wet_7A-Z-17

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.14418°N Long: -73.90944°W Datum: WGS84

Soil Map Unit Name: Mh - Medisaprists-Hydraquents, tidal marsh NWI classification: PFO1

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 _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag 7A-Z-17</u>
Remarks: (Explain alternative procedures here or in a separate report.) Palustrine forested wetland. Hardwood swamp.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
_____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) <u>X</u> 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)		_____ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) _____ Moss Trim Lines (B16) <u>X</u> Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>16</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>4</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: Wet_7A-Z-17

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.7%</u> (A/B)																
2. <u>Salix alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Ulmus americana</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Fraxinus pennsylvanica</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>75</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Viburnum cassinoides</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>113</u></td> <td>x 2 = <u>226</u></td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>193</u> (A)</td> <td><u>476</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.47</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>113</u>	x 2 = <u>226</u>	FAC species <u>70</u>	x 3 = <u>210</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>193</u> (A)	<u>476</u> (B)	Prevalence Index = B/A = <u>2.47</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
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Column Totals: <u>193</u> (A)	<u>476</u> (B)																			
Prevalence Index = B/A = <u>2.47</u>																				
2. <u>Rhamnus cathartica</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Fraxinus pennsylvanica</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Salix alba</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>70</u> =Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Fraxinus pennsylvanica</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>X</u> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Bidens frondosa</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Phragmites australis</u>	<u>3</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>33</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u>Celastrus orbiculatus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	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.																
2. <u>Toxicodendron radicans</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>15</u> =Total Cover																				
Hydrophytic Vegetation Present? Yes <u>X</u> No _____																				

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

SOIL

Sampling Point: Wet_7A-Z-17

[illegible]