

**APPENDIX M**  
**CASE 10-T-0189**  
**WATERBODY INVENTORY (114A) & WETLAND**  
**DELINEATION REPORT**

# Champlain Hudson Power Express



## Revised Wetland & Waterbodies Delineation Report – Phase 1

**Case 10-T-0139  
Putnam - Whitehall, New York**

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Attachment 1	Wetland Determination Data Sheets and Wetland Photographs
Attachment 2	NWI & State Wetland and Stream Mapping
Attachment 3	NRCS Soil Mapping
Attachment 4	Tables
Attachment 5	Wetlands and Waterbodies Delineation Mapping
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## 1.0 INTRODUCTION

CHA Consulting, Inc. (“CHA”) has prepared this wetland and waterbodies delineation report on behalf of Champlain Hudson Power Express, Inc. (“CHPE”) and Kiewit Construction (Kiewit) for the Champlain Hudson Power Express Project (Project). CHA was retained by Kiewit to identify and delineate jurisdictional wetlands and waterbodies regulated under Section 404 of the Clean Water Act (CWA), Section 10 of the Rivers and Harbors Act of 1899, and Article 24 Freshwater Wetlands Act (FWW) and Article 15 (Protection of Waters) of the Environmental Conservation Law along the overland transmission cable route that follows State, county and local roadways and the Canadian-Pacific (“CP”) railroad rights-of-way (“ROW”). Delineations were conducted with the objective of verifying and updating previous wetland delineations performed for the Project Corridor as part of the Article VII and Section 10/404 permitting processes. This report is an addendum to the February 2022 delineation report. It describes the wetland delineation methodology and the existing wetland and waterbody resources that were identified in the Project Corridor (also defined as the Jurisdictional Determination limits) during field surveys for the overland portions of the Project.

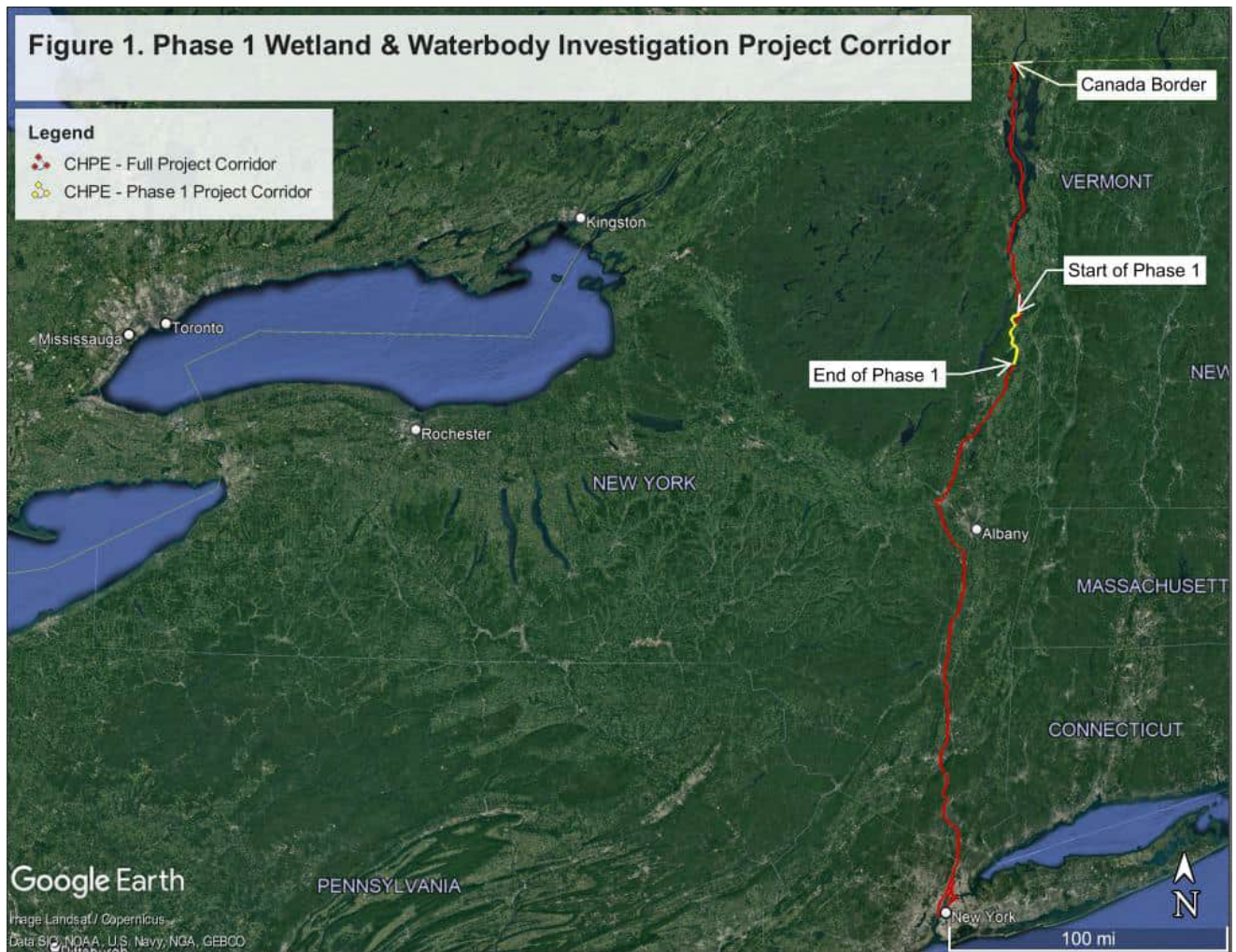
This revision includes the laydown and staging area located on Ryder Road (new wetlands SA1, SA2, SA3 & SA4), additional delineation along Lake Road (expanded delineations of Wetlands CO and CP, Stream CS13, and delineation of a wetland (Wetland CPA) abutting Stream CS13 on the south side of Lake Road), and additional delineation along Route 22 (Wetlands 1A-A, A1-B, A1-C, 1A-D, 1B-A, and Stream 1B-S1) to reflect alignment changes resulting from discussion with the NYS Department of Transportation.

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## **2.0 PHASE I CORRIDOR OVERVIEW**

From the Canada border, the proposed transmission cable route enters Lake Champlain and travels south to the Town of Putnam, New York. In the Town of Putnam, the transmission cables will transition from the waters of Lake Champlain to the land on the western shore via a horizontal directional drill (“HDD”) and subsequently enters County Route 3 and Lake Road for approximately 3.2 miles (approximate Sta. 10000 +00 to Sta.10161+00) to intersect with the New York State Route 22 ROW. The cables continue within the Route 22 ROW approximately 16.5 miles (approximate Sta.12500+00 to Sta 13038+71) until the CP Railroad ROW. The cable route enters the CP ROW and remains primarily within the ROW for approximately 5.9 miles (Sta. 15000+10 to Sta. 15306+44) to the end of Phase I. The entire project corridor is approximately 339 miles from Montreal, Quebec, Canada to New York City, New York, USA. Figure 1 below shows the route from the Canadian border to New York City and highlights the approximately 27 miles of the Phase 1 Project Corridor that was investigated for wetlands and waterbodies.

**Figure 1: Package 1 Wetland & Waterbody Investigation Project Corridor**



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### 3.0 WETLAND DELINEATION METHODOLOGY

To determine the potential for wetland impacts from construction of the Project, CHA assessed the Project survey area in the field for the presence of federal (Section 404 CWA & Section 10 of the Rivers and Harbors Act of 1899) and state (Article 24 FWW) jurisdictional wetlands. Greenman Pedersen, Inc. (GPI) assisted with the field work. Wetland scientists from CHA conducted wetland delineations from October to January 2022, and as part of this addendum, again in April and August 2022. The delineation criteria and methodology were performed in accordance with the United States Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual, the *Regional Supplement to the Corps of Engineers Wetland Manual: Northcentral and Northeast Region* (January 2012) wetland as well as the New York State Freshwater Wetlands Delineation Manual (Browne et. al., 1995).

The Project Corridor for the surveyed portions of the project included the land within the existing NYS Route 22 ROW, County Route 3, local roads, and the CP railroad ROW. The wetland delineation limits were approximately 50 feet from the edge of pavement and approximately 100 feet from the outside edge of rail, limited to the side of the road or railroad corridor on which the alignment follows and within the ROW of the aforementioned roads and railroad.

In accordance with the procedures provided in the USACE Wetland Delineation Manual (1987), and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0 (January 2012), the "Routine Wetland Determination" method was used to delineate wetland boundaries.

The wetland boundaries were determined in the field based on the three-parameter approach, whereby an area is a wetland if it exhibits vegetation adapted to wet conditions (hydrophytes), hydric soils, and the presence or evidence of water at or near the soil surface during the growing season (hydrology).

Coded surveyor's ribbons (e.g. flag code A-1, A-2, etc.) were placed along the wetland boundaries based on observations of vegetation, soils and hydrologic conditions. Data points were recorded along the wetland boundaries at various locations across different vegetative community types correlating to each wetland. At each location a wetland data point and an upland data point were recorded to show the difference between the wetland and upland habitats. At a minimum, one data

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point set (wetland and upland) was collected for each wetland. Additional data points were collected for large wetlands and for changes in vegetative communities. Wetland Determination Data Sheets corresponding to each point can be found in Attachment 1.

Wetlands within the Phase 1 Project Corridor falls under the jurisdiction of the USACE, Adirondack Park Agency (APA) and the New York State Department of Environmental Conservation (NYSDEC). The New York State methodology similarly recognizes the three parameters of vegetation, soils, and hydrology; however, under the New York State method the hydric vegetation criterion is mandatory, while the other two parameters are not (Browne et. al. 1995). Wetlands regulated by the APA are typically one acre or more in size. Those wetlands regulated by NYSDEC (outside the Adirondack Park) must be at least 12.4 acres (5 hectares) in size, unless they are deemed to have unusual local importance (Article 24 FWW). The NYSDEC and APA publish maps of wetland areas under state jurisdiction; however, both agencies use field delineation to determine the precise boundaries of these wetland areas.

Prior to actual field delineations for wetland resources, CHA reviewed USGS 7.5-minute topographic maps, aerial photographs, National Wetland Inventory (NWI) mapping, United States Department of Agriculture Natural Resources Conservation Service (NRCS) soil mapping, NYSDEC freshwater wetlands mapping and APA wetland mapping to identify potential wetland features present within the Project Corridor. More importantly, CHA used the previous wetland delineation prepared for this Project Corridor and alternatives for the purposes of verifying and modifying the previous delineation. Refer to Attachment 2 for NWI and NYSDEC Freshwater Wetland & Stream Mapping and Attachment 3 for NRCS Soil Mapping.

Waterbodies within the Project Corridor, including streams under NYSDEC Article 15 jurisdiction, were identified by the presence of an ordinary high-water mark (OHWM) or stream channel. Delineation and flagging were completed to identify the ordinary high-water mark (OHWM) for most perennial and intermittent streams.

This report documents the wetlands and waterbodies potentially under federal and State jurisdiction that were identified in the survey area along the current proposed underground transmission cable route. Summaries of wetlands that were identified are provided in Table 4-1 in Attachment 4. Wetlands and Waterbodies Delineation Mapping is included in Attachment 5.

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Wetland determination data forms and photographic documentation of the wetlands are included in Attachment 1.

## **4.0 WETLAND & WATERBODIES DELINEATION RESULTS**

A total of 112 wetland areas were identified in the survey area along the Phase I Project Corridor totaling approximately 34.5 acres within the Project Corridor (also defined as the Jurisdictional Determination limits). Table 4-1 in Attachment 4 provides a summary of the wetlands identified along the Phase I Project Corridor, including their classification in accordance with Cowardin et al. (1979) and their state or federal jurisdiction. Of these, seven (7) wetlands delineated along the Project Corridor correspond with wetlands mapped by the NYSDEC.

Narrative descriptions of wetland vegetation, hydrology, and soils observed within the Project survey area are presented in the following sections. The wetlands delineated within the surveyed areas are summarized in Table 4-1. Table 4-2 summarizes the waterbodies identified within the surveyed areas. Table 4-3 provides the soil series information assembled for the Project Corridor. Refer to Attachment 4 for each of these tables. The Wetlands and Waterbodies Delineation Mapping shows the locations of delineated wetlands and waterways are provided in Attachment 5. Photographs of the waterbodies can be found in Attachment 6.

### **4.1 VEGETATION**

Vegetative communities within wetlands are described according to *Ecological Communities of New York State, Second Edition* (Edinger 2014)<sup>1</sup> and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin 1979)<sup>2</sup>. Using this hierarchical wetland classification system three primary cover types were identified for vegetated wetlands in the survey area: palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) wetlands.

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<sup>1</sup> Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. *Ecological Communities of New York State*. Second Edition. A revised and expanded edition of Carol Reshke's *Ecological Communities of New York State*. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.

<sup>2</sup> Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe, 1979. *Classification of wetlands and deepwater habitats of the United States*. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

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Some wetlands contained co-dominant emergent, scrub-shrub, or forested vegetation. Open water areas were identified as palustrine unconsolidated bottom (PUB), lacustrine limnetic unconsolidated bottom (L1UB), and lacustrine littoral aquatic bed (L2AB).

#### **4.1.1 Palustrine Emergent Wetland**

The palustrine emergent wetland cover type is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens (Cowardin et. al., 1979). The freshwater emergent wetlands along the Project survey area primarily include shallow emergent marshes, deep emergent marshes, common reed/purple loosestrife marshes, and ditch/artificial intermittent stream channels (Edinger et. al., 2014). PEM wetlands occur as a single dominant wetland cover type, and as a co-dominant wetland type when other plant community types exist within the wetland.

Shallow emergent marshes occur on mineral soils or deep muck soils that are permanently saturated and seasonally flooded. Water depths range from 6 inches to 3.3 feet during flood stages (Edinger et. al., 2014). Characteristic vegetation of shallow emergent marshes within the Project survey area includes cattails (*Typha* spp.), sedges (*Carex* spp.), goldenrods (*Solidago* spp.), spotted joe-pye-weed (*Eupatorium maculatum*), reed canary grass (*Phalaris arundinacea*), scouring rush (*Equisetum hyemale*), sensitive fern (*Onoclea sensibilis*), and soft rush (*Juncus effusus*). Invasive species observed within the shallow emergent marshes include common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*).

Deep emergent marshes occur on mineral soils or fine-grained organic soils with water depths ranging from 6 inches to 6.6 feet (Edinger et. al., 2002). Emergent vegetation observed within deep emergent marshes in the Project survey area includes cattails and bulrushes (*Scirpus* spp.). Common reed and purple loosestrife were observed within some of the deep emergent marshes within the Project Corridor.

Common reed/purple loosestrife marshes consist of disturbed marshes where common reed or purple loosestrife has become dominant (Edinger et. al., 2014). This community was commonly found within disturbed areas adjacent to the CP rail bed.

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The ditch/artificial intermittent stream community consists of artificial waterways constructed for drainage or irrigation (Edinger et. al., 2014). Vegetation within the ditches is typically dominated by grasses and sedges. Invasive species such as common reed, purple loosestrife, and reed canary grass are commonly found within the ditches along the railroad and highway ROWs.

#### **4.1.2 Palustrine Scrub-Shrub Wetland**

The scrub-shrub wetland cover type includes areas that are dominated by saplings and shrubs that are less than 20 feet tall (Cowardin et. al., 1979). Scrub-shrub wetlands along the Project survey area were dominated by silky dogwood (*Cornus amomum*), gray dogwood (*Cornus racemosa*), and honeysuckle (*Lonicera spp.*). Other vegetation observed includes black willow (*Salix nigra*), gray birch (*Betula populifolia*), weeping crack willow (*Salix babylonica*), and nannyberry (*Viburnum lentago*). Invasive species observed within scrub-shrub wetlands includes honeysuckle and common buckthorn (*Rhamnus cathartica*). PSS wetlands occur as a single dominant wetland cover type, and as a co-dominant wetland type when other plant community types exist within the wetland.

#### **4.1.3 Palustrine Forested Wetland**

Forested wetland cover types are dominated by trees and shrubs that have a tolerance to a seasonal high-water table. For a community to be characterized as forested, a wetland must be dominated by trees and shrubs that are at least six meters tall (Cowardin et. al., 1979). Forested wetlands typically have a mature tree canopy, and depending upon the species and density, can have a broad range of understory and groundcover community components. Forested wetland communities along the Project survey area include red maple hardwood swamps, floodplain forest, and silver maple-ash swamps (Edinger et al., 2014). PFO wetlands occur as a single dominant wetland cover type, and as a co-dominant wetland type when other plant community types exist within the wetland.

Red maple-hardwood swamps occur in poorly drained depressions, usually on inorganic soils. Red maple is either the only dominant tree species or is codominant with one or more hardwoods (Edinger et. al, 2014). Hardwood species observed within this community type within the Project survey area include green and white ash (*Fraxinus pennsylvanica* and *F. americana*), American elm (*Ulmus americana*), northern red oak (*Quercus rubra*), swamp white oak (*Quercus bicolor*), red maple (*Acer rubrum*), and white pine (*Pinus strobus*). Shrub species commonly observed



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within red maple-hardwood swamps in the Project survey area include dogwoods, gray birch and honeysuckle. The herbaceous layer typically includes sensitive fern, cinnamon fern (*Osmundastrum cinnamomeum*) tussock sedge (*Carex stricta*), goldenrods, and reed canary grass. Invasive species observed within red maple-hardwood forests included honeysuckle, buckthorn, and reed canary grass.

Floodplain forests typically occur on mineral soils on low terraces of river floodplains and river deltas (Edinger et al., 2014). Tree species observed within this community type in the Project survey area include green ash, cottonwood (*Populus deltoides*), red maple, American elm, and swamp white oak (*Quercus bicolor*). Shrubs included dogwoods, honeysuckle, and gray birch. Sensitive fern, cinnamon fern, goldenrods, horsetail, and sedges were commonly found in the herbaceous layer. Invasive honeysuckles and buckthorns were also observed in floodplain forests within the Project survey area.

Silver maple-ash swamps occur in poorly drained depressions or along the borders of large lakes and, less frequently, in poorly drained soils along rivers. Ash-elm dominated swamps with little or no silver maple (red maple may be present) are currently included as part of this community type (Edinger et. al., 2002). Tree species observed within this community within the Project survey area include green ash, elms, swamp white oak and cottonwood. Shrub species observed included silky and gray dogwood, as well as willows (*Salix spp.*). The herbaceous layer typically included tussock sedge, jewelweed (*Impatiens capensis*), cattails, goldenrods, sensitive fern, and rough and field horsetail (*Equisetum hyemale* and *E. arvense*). Invasive species observed within silver maple-ash swamps included honeysuckles and buckthorns.

#### **4.1.4 Open Water**

Besides vegetated wetlands, a few scattered small ponds are located along the transmission cable corridor, adjacent to the railroad and highway ROWs as are streams and Lake Champlain. As previously noted, open water communities are identified as palustrine unconsolidated bottom (PUB), lacustrine limnetic unconsolidated bottom (L1UB), and lacustrine littoral aquatic bed (L2AB). These communities are characterized by a vegetation cover of less than 30 percent, although there may often be emergent or shrubby vegetation bordering the open water areas. Characteristic species observed along the edges of these communities were narrow leaf cattail

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(*Typha angustifolia*), common duckweed (*Lemna minor*) and a variety of sedge species (*Carex spp.*) Pond substrates may be silt, mud, cobble or sand.

## **4.2 HYDROLOGY**

### **4.2.1 Streams**

Table 4-2 lists the 53 streams (perennial (27), intermittent (26)) identified within the Project Corridor. The overland transmission cable route is located within the Lake Champlain Basin. The Lake Champlain Basin drains the area between the Adirondacks and the Green Mountains in Vermont. Perennial waterbodies within the Project Corridor in this watershed include Pine Lake Brook, South Bay of Lake Champlain, Halfway Creek, abandoned sections of the Champlain Canal, as well as unnamed tributaries connected to these watersheds identified on USGS Topographic Maps and/or identified during the field delineation.

### **4.2.2 Wetlands**

Site hydrology was examined within each wetland and adjacent upland areas. Indicators of wetland hydrology included inundation (A1) or evidence of inundation (A2 & A3) (such as water-stained leaves (B9) or buttressed tree trunks), trees with shallow roots, saturation within the upper portion of the soil (A3) during the growing season, drainage patterns (B10) and drift lines within wetlands, sediment deposition (B2), and oxidized root channels (C3) in the upper 12 inches of soil (Attachment 1). Hydrologic factors contributing to the presence of wetland hydrology within wetlands in the Project Corridor included inundation with river, pond, or stream water, temporarily ponded runoff, and seasonally to permanently shallow groundwater tables.

Hydrology along the Project Corridor has been historically altered by road and railroad drainage ditches. CHA inspected these ditches for the presence or absence of wetland indicators and hydrologic connectivity to wetlands or streams. Ditches that met the three parameters for wetland delineation (i.e., presence of hydrology, hydric soils, and hydrophytic vegetation) were identified as a wetland community.

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### **4.3 SOILS**

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil map units for the Project Corridor provided in Attachment 3. Indicators of hydric soils included muck or evidence of gleied colors such as histic epipedon (A2), black histic (A3), depleted below dark surface (A11), thick dark surface (A12), sandy redox (S5), dark surface (S7), thin dark surface (S9), loamy gleied matrix (F2), depleted matrix (F3) and redox dark surface (F6) (Attachment 1). Within the Project Corridor, a total of 21 different soil types have been mapped by the NRCS. The mapped soil types range from excessively drained to very poorly drained soils. According to the National List of Hydric Soils prepared by the NRCS (2009) (Section 4.4 and Attachment 4, Table 4-3), six (6) of the soils mapped within the Project Corridor are classified as hydric soils (Carlisle muck, Catden muck, Covington silty clay loam, Limerick silt loam, Saco silt loam and Saprist, Aquepts, and Aquepts). Hydric soils are defined as soils “that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil” (Federal Register, 1994). Table 4-3 summarizes the soil series in the Project survey area and lists the soils that are classified as hydric (or associated with wetland hydrology) in the Project Corridor.

Many soils within the Project Corridor are formed from glacial parent materials including outwash, dense till, loose till, and glaciomarine deposits. In active floodplains, soils are formed in recent alluvium. Anthropogenically disturbed soils, associated with road and railroad construction and operation, are common within the Project Corridor. The disturbed soils consist of disturbed natural deposits or human transported materials.

### **4.4 NATURAL RESOURCE CONSERVATION SERVICE SOIL SERIES DESCRIPTIONS**

The following are the abbreviated descriptions of each of the relevant soil types taken from the USDA Web Soil Survey (NRCS, USDA 2021). Soils survey mapping and additional information regarding relevant soil characteristics are provided in Attachment 3.

#### **Carlisle Series (Ca)**

These deep and very poorly drained organic soils formed in woody fibrous material that accumulated in waterlogged bogs. They are nearly level and are found in depressions within

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glaciated uplands, lake plains, and outwash plains. The surface layer is black organic material 10 inches thick. Below this layer is a 15-inch layer of black, massive, well decomposed organic material. The following 49 inches is composed of dark reddish-brown, massive, well-decomposed organic material. From a depth of 74 to 80 inches is very dusky red, massive, neutral, fibrous organic material. Below 80 inches is a 6-inch layer of light-gray, slightly sticky and slightly plastic, calcareous marl and 24 inches of dark-drain, massive, slightly sticky and slightly plastic, calcareous silt.

### **Catden Series (Ca)**

These organic/muck soils are characterized as very deep and very poorly drained. They are formed in highly decomposed woody and herbaceous organic materials in depressions on till plains, lake plains, outwash plains, and flood plains. Saturated hydraulic conductivity is moderately high or high with slopes ranging from 0 to 2 percent. The organic material may extend to a depth of 51 inches or more, and surface tiers are characterized with hues of 5YR to 2.5Y, or neutral, values of 1 to 4 and chromas of 0 to 6. It is dominantly muck (sapric material); however, some pedons have surface layers of peat (fibric material) or mucky peat (hemic material). The structure of the surface tier is weak or medium, coarse to fine granular, platy, subangular blocky, or is massive. Subsurface and bottom tiers have hues, values and chromas are similar to the surface layers.

### **Charlton Series (CHC & CHE)**

These deep, well drained soils formed in glacial till from syenite and granite gneiss. Slopes range from 0 to 50 percent. The A horizon is very dark grayish-brown sandy loam 2 inches thick. It has a weak granular structure. The upper 5 inches of the B horizon is dark-brown sandy loam, and the lower 21 inches is yellowish-brown sandy loam. The B horizon has weak subangular blocky structure. The C horizon is light olive brown sandy loam with pockets of loamy sand. The horizon is massive.

### **Claverack Series (CIA & CIB)**

These very deep, moderately well drained soils formed in sandy deposits that overlie clayey lacustrine sediments. They are nearly level to sloping soils in shallow deltas on lake plains. The sand, which overlies finer textured sediments, is dominated by quartz and has been derived primarily from non-calcareous sandstone or granite. Slope ranges from 0 to 15 percent. Typically,

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the A horizon consists of a fine sand and is usually a dark grayish brown color. The B horizon consists of structureless sand. In some places, the lower part of the B horizon has gray or grayish brown redoximorphic features below a depth of 18 inches. The C horizon is a silty clay loam or clay with some sub-horizons of silt or loam, up to 5 inches thick.

### **Covington Series (Cv)**

These very deep and poorly drained soils formed in calcareous clayey glacio-lacustrine or glacio-estuarine deposits on glacial lake plains. These soils are found on broad plains, depressions, and drainageways. Slopes range from 0 to 8 percent. The A horizon consists of very dark brown silty clay or silty clay loam with granular or blocky structure, to a depth of 8 inches. The B horizon is dark gray firm to very firm, sticky or plastic clay with thin sub-horizons of silty clay, extending to a depth of 33 inches. High chroma redoximorphic features are typical of this horizon. The C horizon is typically dark gray firm to very firm, sticky or plastic clay or silty clay, although silt and silt loam varves alternate with clay varves in some pedons. The C horizon may extend to a depth of 65 inches and has redoximorphic features similar to that of the B horizon.

### **Farmington Series (FCC)**

These shallow, well drained and somewhat excessively drained soils formed in till. Slopes range from 0 to 70 percent. The A horizon is dark grayish brown silt loam with granular structure. The B horizon is composed of a yellowish-brown silt loam 6-inches thick, followed by 4-inches of brown loam with redoximorphic features. The texture is very fine sandy loam to silt loam, and the structure is granular to subangular blocky. The R horizon is limestone, dolomite, or dolomitic limestone bedrock.

### **Hartland Series (HcB &HcC)**

These deep, well-drained medium textures soils formed in water-sorted silt and very fine sand, and occur typically in cultivated areas. Slopes range from 0 to 20 percent. The A horizon is up to 10 inches deep and consists of a dark brown very fine sandy loam with a very weak, fine granular structure. The B horizon is up to 5 inches deep with a yellowish-brown color with a weak, medium, subangular, blocky structure. Depth to bedrock is more than 6 feet.

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### **Hollis Series (HLE & HNC)**

These shallow, somewhat excessively drained soils formed in glacial till. Slopes range from 0 to 60 percent. The A horizon is dark brown loam 4 inches thick with weak granular structure. The upper 4 inches of the B horizon is strong-brown sandy loam and the lower 11 inches is yellowish-brown fine sandy loam. The B horizon has weak granular or weak blocky structure. Bedrock is at a depth of 19 inches.

### **Hoosic Series (HSDK)**

These very deep, somewhat excessively drained soils formed in glacial outwash plains, valley trains, and related terraces, kames, eskers, and water sorted parts of moraines. Slopes range from 0 to 60 percent. The A horizon is dark grayish brown gravelly sandy loam with granular to subangular blocky structure. The B horizon is yellowish brown gravelly sandy loam. The structure is granular or subangular blocky, and some sub horizons have single grain and loose structure. The BC horizon is yellowish brown very gravelly loamy sand with granular structure. The C horizon is light olive brown and dark grayish brown. The texture is loamy sand to coarse sand, and the horizon has a single grain and loose structure.

### **Hudson Series (HWE)**

These very deep, moderately well drained soils formed in clayey and silty lacustrine sediments. These soils are in convex lake plains, lacustrine capped uplands, and on lower valley side-slopes. Slopes can range from 0 to 60 percent. The A horizon is typically brown silt loam and silty clay loam, with granular structure, extending 5 to 12 inches deep. The E horizon, when present, consists of faintly mottled brown, very fine sandy loam or silt loam with blocky or platy structure. The B horizon generally is firm yellowish brown to brown silty clay with moderate or strong blocky structure and may have medium to very coarse prisms. Low- and high-chroma redoximorphic features are present, but may be faint or absent in the shallower portions. The C horizon is mixed grayish brown and light olive brown silty clay, with massive structure, or plate-like divisions.

### **Kingsbury Series (KbA & KbB)**

These very deep, somewhat poorly drained soils formed in clayey glacio-marine or glacio-lacustrine sediments. They are nearly level or gently sloping, ranging from 0 to 8 percent slope.

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The A horizon is typically very dark grayish brown silt loam, and texture can range from very fine sandy loam to clay. This horizon has granular or blocky structure. The E horizon generally is mixed brown and yellowish brown silty clay, but can be silt loam or very fine sandy loam, with blocky to platy structure. Redoximorphic features occur throughout. The B horizon typically consists of dark grayish brown clay, mixed with yellowish brown clay in the shallower portions. Typically, it has greater than 50 percent redoximorphic depletions on ped faces with concentrations in ped interiors. This horizon generally has blocky structure, within coarse or very coarse prisms. The C horizon generally has similar color to the deeper portions of the B horizon, although redoximorphic features generally have lower contrast. This horizon ranges from silty clay loam to clay in texture, and has massive structure, which, when disturbed, can part into aggregates resembling very fine blocky structure.

### **Limerick Series (Lm)**

These deep, poorly drained soils formed in alluvial deposits of silt and very fine sand. They are nearly level and are found in low areas on flood plains. The A horizon is very dark grayish brown about 3 inches thick. The structure of the A horizon is granular. The C horizon is typically a silt loam or very fine sandy loam that extends to a depth of 50 inches or more. The C horizon has grayish brown redoximorphic features to a depth of 14 inches, olive gray redoximorphic features between depths of 14 and 26 inches, and gray redoximorphic features below 26 inches. The C horizon is massive or has a subangular blocky or granular structure.

### **Oakville Series (OaB)**

These very deep and well drained or moderately well drained soils were formed in water-sorted sand on glacial outwash plains, lake plains, and beach ridges. Slopes range from 0 to 35 percent. The A horizon is dark yellowish brown with a loamy fine sand texture and granular structure. The B horizon is yellowish brown loamy fine sand with subangular blocky structure. The C horizon is typically yellowish brown with a sand or loamy fine sand texture.

### **Orthents and Psamments (OP)**

This map unit consists of material dredge and pumped from the Hudson River and Champlain Barge Canal. The material is composed of a variable mixture of dominantly fine gravel and sand and some silt and clay.

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### **Pits, gravel and Sand (Pr)**

This soil consists of areas that have been excavated for sand or gravel. The areas are mostly on broad outwash plains and terraces of stream valleys. These soils are somewhat excessively drained. These areas have sparse vegetation consisting of Xerophytic plants. Slopes range mostly from 0 to 25 percent and steep escarpments are along the edges of the pits. A few areas have bedrock outcrops and small bodies of water, and a few are used for parking lots and buildings. This unit consists mostly of sand or sand and gravel. In places, the water table is at or near the surface most of the year. A few areas are adjacent to streams and are subject to flooding. Areas of this unit require onsite investigation and evaluation for most uses.

### **Rock outcrop (ROF & RPC)**

Areas mapped as rock outcrop consist of bare bedrock covering 90 percent of the surface. Where mapped with Hollis soils, it typically consists of exposures of syenite or granite gneiss, and in places, quartzite.

### **Saco Series (Sa)**

These very deep, very poorly drained soils formed in recent alluvium on floodplains. Slopes range from 0 to 2 percent. The A horizon is very dark grayish brown silt loam or very fine sandy loam, or their mucky analogs. It is massive or has weak granular structure. Strong brown and grayish brown redoximorphic features are present beginning at a depth of 10 inches. The C horizon is grayish brown or olive gray with a silt loam or very fine sandy loam texture above a depth of 40 inches and loamy fine sand to very gravelly coarse sand texture below 40 inches. The C horizon is massive or has weak structure.

### **Saprists, Aquepts, and Aquents (SB)**

These soils consist of low-lying, level deposits of organic and mineral soil material that is ponded with shallow water most of the year. They are mainly found around the edges of lakes and ponds.

### **Vergennes Series (VeB, VeC & VeD)**

These very deep, moderately well drained soils formed in calcareous estuarine and glacio-lacustrine clays. They are on broad plains and on the tops and side-slopes of hills and ridges, with



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slopes ranging from 0 to 50 percent. The A horizon is generally dark grayish brown clay that has blocky structure. Occasionally, a clay, silty clay, silty clay loam, or silt loam E horizon is present. The B horizon is typically brown clay, with more dark grayish brown color with depth. The C horizon is generally clay with silt and silty clay varves.

### **Wallington Series (Wa)**

These very deep, somewhat poorly drained soils formed in silty lacustrine deposits. Typically occurring on lake plains and silt-covered uplands. They are on lacustrine plains or basins that are nearly level or gently sloping soils that range from 0 to 8 percent slope. The A horizon is generally very dark grayish brown silt loam that has fine and medium granular structure. A pinkish gray silt loam is present in the E horizon. The B horizon is typically brown silt loam, with more dark brown grayish color with depth. The C horizon is generally very fine sandy loam.

## **5.0 SUMMARY**

Wetlands identified along the Project Corridor include shallow emergent marshes, deep emergent marshes, common reed/purple loosestrife marshes, scrub-shrub wetlands, and forested wetlands such as red maple-hardwood swamps, floodplain forests and silver maple-ash swamps. Small ponds, artificial ditches, and watercourses, including small intermittent streams to the South Bay of Lake Champlain, occur within the Project Corridor of the Project.

Land use in the Project Corridor is diverse, ranging from rural, agricultural, and forested areas to more developed areas such as the Village of Whitehall. In general, because a portion of the Project is routed along existing railroad corridors and state highways, many wetlands within the Project Corridor are characterized by previous anthropogenic disturbance and/or the presence of invasive plant species. The Project Corridor frequently is located along the edge between the disturbed railroad or highway corridor and more natural vegetated wetland communities that are present adjacent to the railroad and highway rights-of-way. The wetland boundaries in the Project Corridor are most often defined by the edge of the soil fill for the railroad and highway embankments.

Confirmation of the wetland boundaries are the responsibility of the involved regulatory agencies with jurisdiction over wetlands and waterbodies within this Phase of the overall project. As

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previously noted, wetlands within Phase 1 are regulated by USACE (Section 10/404), NYSDEC (Article 24), and the APA (Article 24). Streams and other waterbodies are regulated by USACE (Section 10/404) and NYSDEC (Article 15). Based on review of the NYSDEC and APA wetland mapping, 7 delineated wetlands areas are identified as regulated under Article 24. These wetlands correspond to 2 mapped wetlands regulated by NYSDEC. No mapped APA wetlands were identified within the Project Corridor. It is anticipated that USACE will take jurisdiction over all the mapped wetlands within the Project Corridor. Final jurisdictional determinations will be made by the respective agencies.

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## 6.0 REFERENCES

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- United States Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers Wetland Manual: Northcentral and Northeast Region (Version 2.0)*. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

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**ATTACHMENT 1**  
**WETLAND DETERMINATION DATA SHEETS AND**  
**WETLAND PHOTOGRAPHS**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/11/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CA-5  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-44-5.27N Long: 73-22-29.43W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CA-5</u>
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.) Palustrine forested wetland dominated by eastern cottonwood. Edinger classification: Red maple-hardwood swamp.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> 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 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 checked="" 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CA-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhamnus cathartica</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  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>Populus deltoides</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Ulmus americana</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>70</u> =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Rhamnus cathartica</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>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>39</u></td> <td>x 2 = <u>78</u></td> </tr> <tr> <td>FAC species <u>109</u></td> <td>x 3 = <u>327</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>163</u> (A)</td> <td><u>465</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.85</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>39</u>	x 2 = <u>78</u>	FAC species <u>109</u>	x 3 = <u>327</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>163</u> (A)	<u>465</u> (B)	Prevalence Index = B/A = <u>2.85</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>39</u>	x 2 = <u>78</u>																			
FAC species <u>109</u>	x 3 = <u>327</u>																			
FACU species <u>15</u>	x 4 = <u>60</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>163</u> (A)	<u>465</u> (B)																			
Prevalence Index = B/A = <u>2.85</u>																				
2. <u>Cornus amomum</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Ulmus americana</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Quercus bicolor</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>60</u> =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Rhamnus cathartica</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Cornus racemosa</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Lysimachia nummularia</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Ulmus americana</u>	<u>3</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Quercus bicolor</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Equisetum hyemale</u>	<u>1</u>	<u>No</u>	<u>FAC</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>23</u> =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>10</u> =Total Cover																				

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

## SOIL

Sampling Point: WET CA-5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	2.5Y 3/2	98	2.5Y 5/4	2	C	M	Loamy/Clayey	Distinct redox concentrations
5-10	2.5Y 4/2	75	2.5Y 5/3	8	D	M	Loamy/Clayey	
			2.5Y 5/6	15	C	M		Prominent redox concentrations
			10YR 2/2	2	C	PL		Distinct redox concentrations
10-17	2.5Y 5/2	80	10YR 2/1	5	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 4/6	15	C	M		Prominent redox concentrations

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)
<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 checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" 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"/> Marl (F10) (LRR K, L)
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	

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

<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> ? Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> ? Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**Type:  NoneDepth (inches): Hydric Soil Present? Yes ☒ No ☐

Remarks:





**Wetland CA-5 View facing north**



**Wetland CA-5 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/11/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CA-6  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-44-4.72N Long: 73-22-30.07W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CA-6</u>
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.) Palustrine Emergent Marsh dominated by common duckweed and American burreed. Edinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<u>X</u> Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	_____ Marl Deposits (B15)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Dry-Season Water Table (C2)	
<u>X</u> Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Stunted or Stressed Plants (D1)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)	
<u>X</u> Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Sparsely Vegetated Concave Surface (B8)		_____ Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: A culvert connects wetland CA to wetland CB.			

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

 Sampling Point: WET CA-6

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Salix nigra</u>	<u>5</u>	<u>Yes</u>	<u>OBL</u>	<b>Dominance Test worksheet:</b>  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>Rhamnus cathartica</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>10</u>	=Total Cover																	
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus sericea</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>110</u></td> <td>x 1 = <u>110</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>6</u></td> <td>x 4 = <u>24</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>144</u> (A)</td> <td><u>198</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.38</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>110</u>	x 1 = <u>110</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>6</u>	x 4 = <u>24</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>144</u> (A)	<u>198</u> (B)	Prevalence Index = B/A = <u>1.38</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>110</u>	x 1 = <u>110</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>8</u>	x 3 = <u>24</u>																			
FACU species <u>6</u>	x 4 = <u>24</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>144</u> (A)	<u>198</u> (B)																			
Prevalence Index = B/A = <u>1.38</u>																				
2. <u>Rhamnus cathartica</u>	<u>3</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>8</u>	=Total Cover																	
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lemna minor</u>	<u>70</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Sparganium americanum</u>	<u>20</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Lysimachia nummularia</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Zizania aquatica</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Persicaria amphibia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
6. <u>Onoclea sensibilis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>120</u>	=Total Cover																	
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Parthenocissus quinquefolia</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. <u>Vitis aestivalis</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>6</u>	=Total Cover																	

 Remarks: (Include photo numbers here or on a separate sheet.)  
 Trees and shrubs were growing along the outer edges of the open water marsh community.

## SOIL

Sampling Point: WET CA-6

[illegible]



**Wetland CA-6 View facing west**



**Wetland CA-6 No Soils collected due to open water dominated by OBL and FACW species.**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/11/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CB-4  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-44-4.78N Long: 73-22-28.49W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CB-4</u>
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.) Palustrine Emergent Marsh dominate by common duckweed. Edinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Culvert under the road (Route 3) leads to Lake Champlain.		

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

 Sampling Point: WET CB-4

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>	<b>Dominance Test worksheet:</b>  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>Ulmus americana</u>	<u>3</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>13</u> =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus sericea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>106</u></td> <td>x 1 = <u>106</u></td> </tr> <tr> <td>FACW species <u>46</u></td> <td>x 2 = <u>92</u></td> </tr> <tr> <td>FAC species <u>7</u></td> <td>x 3 = <u>21</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>164</u> (A)</td> <td><u>239</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.46</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>106</u>	x 1 = <u>106</u>	FACW species <u>46</u>	x 2 = <u>92</u>	FAC species <u>7</u>	x 3 = <u>21</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>164</u> (A)	<u>239</u> (B)	Prevalence Index = B/A = <u>1.46</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>106</u>	x 1 = <u>106</u>																			
FACW species <u>46</u>	x 2 = <u>92</u>																			
FAC species <u>7</u>	x 3 = <u>21</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>164</u> (A)	<u>239</u> (B)																			
Prevalence Index = B/A = <u>1.46</u>																				
2. <u>Rhamnus cathartica</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>12</u> =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lemna minor</u>	<u>65</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Leersia oryzoides</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Lysimachia nummularia</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Bidens frondosa</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Typha latifolia</u>	<u>8</u>	<u>No</u>	<u>OBL</u>																	
6. <u>Persicaria amphibia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
7. <u>Sparganium americanum</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
8. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
9. <u>Lysimachia ciliata</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
10. <u>Zizania aquatica</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
11. <u>Lythrum salicaria</u>	<u>3</u>	<u>No</u>	<u>OBL</u>																	
12. _____	_____	_____	_____																	
<u>134</u> =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>5</u> =Total Cover																				

 Remarks: (Include photo numbers here or on a separate sheet.)  
 The trees and shrubs were observed growing on the banks surrounding the marsh.

## SOIL

Sampling Point: WET CB-4

[illegible]





**Wetland CB-4 View facing south**



**Wetland CB-4 No Soils collected due to open water dominated by OBL and FACW species.**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/11/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-44-5.08N Long: 73-22-28.24W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional Northern Hardwoods. This upland point is for wetlands CA-5, CA-6 and CB-4.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Betula alleghaniensis</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>13</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>30.8%</u> (A/B)																
2. <u>Juniperus virginiana</u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Carya ovata</u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Rhus typhina</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>41</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <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>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>62</u></td> <td>x 4 = <u>248</u></td> </tr> <tr> <td>UPL species <u>31</u></td> <td>x 5 = <u>155</u></td> </tr> <tr> <td>Column Totals: <u>138</u> (A)</td> <td><u>533</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.86</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>40</u>	x 3 = <u>120</u>	FACU species <u>62</u>	x 4 = <u>248</u>	UPL species <u>31</u>	x 5 = <u>155</u>	Column Totals: <u>138</u> (A)	<u>533</u> (B)	Prevalence Index = B/A = <u>3.86</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>40</u>	x 3 = <u>120</u>																			
FACU species <u>62</u>	x 4 = <u>248</u>																			
UPL species <u>31</u>	x 5 = <u>155</u>																			
Column Totals: <u>138</u> (A)	<u>533</u> (B)																			
Prevalence Index = B/A = <u>3.86</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. <u>Lonicera morrowii</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Rhus typhina</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
3. <u>Rhamnus cathartica</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Syringa vulgaris</u>	<u>3</u>	<u>No</u>	<u>UPL</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>28</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Plantago lanceolata</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Artemisia vulgaris</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Symphyotrichum lowrieianum</u>	<u>8</u>	<u>Yes</u>	<u>UPL</u>																	
4. <u>Pinus strobus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u>Equisetum arvense</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
6. <u>Solidago rugosa</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
7. <u>Lysimachia nummularia</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
8. <u>Achillea millefolium</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
9. <u>Betula alleghaniensis</u>	<u>3</u>	<u>No</u>	<u>FAC</u>																	
10. <u>Acer saccharum</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
11. <u>Parthenocissus quinquefolia</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
12. <u>Setaria pumila</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
	<u>64</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. <u>Vitis aestivalis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		

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

## SOIL

Sampling Point: UPL

[illegible]



**Upland CA-5, CA-6 and CB-4 View facing west**



**Upland CA-5, CA-6 and CB-4 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CC-2  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear ditch Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-51.42N Long: 73-22-41.86W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CC-2</u>
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.) Palustrine Emergent Marsh dominated by purple loosestrife. Edinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) <u>X</u> 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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>6</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CC-2

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>235</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.35</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>100</u> (A)	<u>235</u> (B)	Prevalence Index = B/A = <u>2.35</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>45</u>	x 1 = <u>45</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>25</u>	x 4 = <u>100</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>100</u> (A)	<u>235</u> (B)																			
Prevalence Index = B/A = <u>2.35</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lythrum salicaria</u>	<u>45</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Solidago gigantea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Lolium pratense</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Rubia peregrina</u>	<u>8</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Cirsium arvense</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Artemisia vulgaris</u>	<u>2</u>	<u>No</u>	<u>UPL</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
100 =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>        </u>																

## SOIL

Sampling Point: WET CC-2

[illegible]



**Wetland CC-2 View facing north**



**Wetland CC-2 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CC-2  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-51.32N Long: 73-22-42.03W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CC-2

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>93</u></td> <td>x 4 = <u>372</u></td> </tr> <tr> <td>UPL species <u>24</u></td> <td>x 5 = <u>120</u></td> </tr> <tr> <td>Column Totals: <u>117</u> (A)</td> <td><u>492</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.21</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>93</u>	x 4 = <u>372</u>	UPL species <u>24</u>	x 5 = <u>120</u>	Column Totals: <u>117</u> (A)	<u>492</u> (B)	Prevalence Index = B/A = <u>4.21</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>93</u>	x 4 = <u>372</u>																			
UPL species <u>24</u>	x 5 = <u>120</u>																			
Column Totals: <u>117</u> (A)	<u>492</u> (B)																			
Prevalence Index = B/A = <u>4.21</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Schedonorus pratensis</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Lolium perenne</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Symphyotrichum ericoides</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Pastinaca sativa</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Lotus corniculatus</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Artemisia vulgaris</u>	<u>8</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Daucus carota</u>	<u>6</u>	<u>No</u>	<u>UPL</u>																	
8. <u>Cirsium arvense</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Achillea millefolium</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
10. <u>Cichorium intybus</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>117</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <u>        </u> No <u>  X  </u>																

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

## SOIL

Sampling Point: UPL CC-2

[illegible]



**Upland CC-2 View facing west**



**Upland CC-2 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CD-5  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 4  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-51.76N Long: 73-22-49.06W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CD-5</u>
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.) Palustrine Emergent Marsh. Edinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> 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 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 checked="" type="checkbox"/> Other (Explain in Remarks)	<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 checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Directly adjacent to Stream CS2.		

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

 Sampling Point: WET CD-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhamnus cathartica</u>	<u>4</u>	<u>No</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</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>4</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <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>11</u></td> <td>x 1 = <u>11</u></td> </tr> <tr> <td>FACW species <u>33</u></td> <td>x 2 = <u>66</u></td> </tr> <tr> <td>FAC species <u>58</u></td> <td>x 3 = <u>174</u></td> </tr> <tr> <td>FACU species <u>31</u></td> <td>x 4 = <u>124</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>138</u> (A)</td> <td><u>400</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.90</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>11</u>	x 1 = <u>11</u>	FACW species <u>33</u>	x 2 = <u>66</u>	FAC species <u>58</u>	x 3 = <u>174</u>	FACU species <u>31</u>	x 4 = <u>124</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>138</u> (A)	<u>400</u> (B)	Prevalence Index = B/A = <u>2.90</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>11</u>	x 1 = <u>11</u>																			
FACW species <u>33</u>	x 2 = <u>66</u>																			
FAC species <u>58</u>	x 3 = <u>174</u>																			
FACU species <u>31</u>	x 4 = <u>124</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>138</u> (A)	<u>400</u> (B)																			
Prevalence Index = B/A = <u>2.90</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. <u>Pinus strobus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Rhamnus cathartica</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Cornus amomum</u>	<u>8</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Lonicera morrowii</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>34</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Solidago gigantea</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Solidago rugosa</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Ranunculus acris</u>	<u>8</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Rumex verticillatus</u>	<u>6</u>	<u>No</u>	<u>OBL</u>																	
6. <u>Rubia peregrina</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. <u>Lythrum salicaria</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
9. <u>Geum aleppicum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
10. <u>Pinus strobus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
11. <u>Prunella vulgaris</u>	<u>3</u>	<u>No</u>	<u>FAC</u>																	
12. <u>Cirsium arvense</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
	<u>100</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
       Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

## SOIL

Sampling Point: WET CD-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 4/1	98	10YR 5/4	2	C	M	Loamy/Clayey	Distinct redox concentrations
7-16	10YR 4/1	60	10YR 5/6	35	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 5/6	5	C	PL		Prominent redox concentrations

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

<sup>2</sup>Location: 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)

☐ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)

☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)

☐ High Chroma Sands (S11) (**LRR K, L**)

☐ 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)

☐ Marl (F10) (**LRR K, L**)

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

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)

☐ ? Coast Prairie Redox (A16) (**LRR K, L, R**)

☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)

☐ Polyvalue Below Surface (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 (F22)

☐ Other (Explain in Remarks)

**Restrictive Layer (if observed):**

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

Depth (inches): \_\_\_\_\_ 16

**Hydric Soil Present?**

Yes ☒ No \_\_\_\_\_

Remarks:

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





**Wetland CD-5 View facing northwest**



**Wetland CD-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CD-5  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-51.31N Long: 73-22-48.55W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional Northern Hardwoods	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CD-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhamnus cathartica</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</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>28.6%</u> (A/B)																
2. <u>Fraxinus americana</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Pinus strobus</u>	<u>6</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Juniperus virginiana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Prunus serotina</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>69</u> =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Lonicera morrowii</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	<b>Prevalence Index worksheet:</b>  <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>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>104</u></td> <td>x 4 = <u>416</u></td> </tr> <tr> <td>UPL species <u>31</u></td> <td>x 5 = <u>155</u></td> </tr> <tr> <td>Column Totals: <u>205</u> (A)</td> <td><u>781</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.81</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>70</u>	x 3 = <u>210</u>	FACU species <u>104</u>	x 4 = <u>416</u>	UPL species <u>31</u>	x 5 = <u>155</u>	Column Totals: <u>205</u> (A)	<u>781</u> (B)	Prevalence Index = B/A = <u>3.81</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>																			
FAC species <u>70</u>	x 3 = <u>210</u>																			
FACU species <u>104</u>	x 4 = <u>416</u>																			
UPL species <u>31</u>	x 5 = <u>155</u>																			
Column Totals: <u>205</u> (A)	<u>781</u> (B)																			
Prevalence Index = B/A = <u>3.81</u>																				
2. <u>Rhamnus cathartica</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Cornus racemosa</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Fraxinus americana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Pinus strobus</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>53</u> =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Symphyotrichum ericoides</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Rubia perigrina</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Pinus strobus</u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Symphyotrichum lowrieanum</u>	<u>6</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Berberis vulgaris</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Juniperus virginiana</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
10. <u>Parthenocissus quinquefolia</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>80</u> =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>3</u>	<u>No</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>3</u> =Total Cover																				

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

## SOIL

Sampling Point: UPL CD-5

[illegible]



**Upland CD-5 View facing southwest**



**Upland CD-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CE-8  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-52.04N Long: 73-22-54.64W Datum: WGS 84  
 Soil Map Unit Name: HWE - Hudson and vergennes soil, steep and very steep NWI classification: PEM2  
 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CE-8</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<u>X</u> Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	_____ Marl Deposits (B15)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Dry-Season Water Table (C2)	
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Stunted or Stressed Plants (D1)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)	
_____ Inundation Visible on Aerial Imagery (B7)	<u>X</u> Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Sparsely Vegetated Concave Surface (B8)		_____ Microtopographic Relief (D4)	
		_____ FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>4</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Adjacent to stream CS3.			

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

Sampling Point: WET CE-8

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhamnus cathartica</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57.1%</u> (A/B)																
2. <u>Juniperus virginiana</u>	<u>1</u>	<u>No</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>6</u>	=Total Cover	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>53</u></td> <td>x 1 = <u>53</u></td> </tr> <tr> <td>FACW species <u>21</u></td> <td>x 2 = <u>42</u></td> </tr> <tr> <td>FAC species <u>16</u></td> <td>x 3 = <u>48</u></td> </tr> <tr> <td>FACU species <u>33</u></td> <td>x 4 = <u>132</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>123</u> (A)</td> <td><u>275</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.24</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>53</u>	x 1 = <u>53</u>	FACW species <u>21</u>	x 2 = <u>42</u>	FAC species <u>16</u>	x 3 = <u>48</u>	FACU species <u>33</u>	x 4 = <u>132</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>123</u> (A)	<u>275</u> (B)	Prevalence Index = B/A = <u>2.24</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>53</u>	x 1 = <u>53</u>																			
FACW species <u>21</u>	x 2 = <u>42</u>																			
FAC species <u>16</u>	x 3 = <u>48</u>																			
FACU species <u>33</u>	x 4 = <u>132</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>123</u> (A)	<u>275</u> (B)																			
Prevalence Index = B/A = <u>2.24</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Lonicera morrowii</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Rhamnus cathartica</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Pinus strobus</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>17</u>	=Total Cover	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Leersia oryzoides</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Inula helenium</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Trifolium repens</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Cornus sericea</u>	<u>8</u>	<u>Yes</u>	<u>FACW</u>																	
5. <u>Eupatorium perfoliatum</u>	<u>6</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Symphyotrichum puniceum</u>	<u>6</u>	<u>No</u>	<u>OBL</u>																	
7. <u>Typha latifolia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
8. <u>Eutrochium maculatum</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
9. <u>Lythrum salicaria</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
10. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
11. <u>Onoclea sensibilis</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
12. <u>Juncus effusus</u>	<u>2</u>	<u>No</u>	<u>OBL</u>																	
		<u>100</u>	=Total Cover	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover																	

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

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

 Sampling Point: WET CE-8

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
	<u>6</u>	=Total Cover	
<u>Sapling/Shrub Stratum</u>			
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
	<u>17</u>	=Total Cover	
<u>Herb Stratum</u>			
13. <u>Geum aleppicum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>
14. <u>Athyrium angustum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>
15. <u>Prunella vulgaris</u>	<u>2</u>	<u>No</u>	<u>FAC</u>
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
21. _____	_____	_____	_____
22. _____	_____	_____	_____
23. _____	_____	_____	_____
24. _____	_____	_____	_____
	<u>100</u>	=Total Cover	
<u>Woody Vine Stratum</u>			
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	_____	=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.

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



## SOIL

Sampling Point: WET CE-8

[illegible]





**Wetland CE-8 View facing west**



**Wetland CE-8 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CE-8  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 6  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-51.99N Long: 73-22-55.01W Datum: WGS 84  
 Soil Map Unit Name: HWE - Hudson and vergennes, steep and very steep 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Sucessional Northern Hardwoods	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> 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 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 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)	
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CE-8

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Juniperus virginiana</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  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>Acer saccharum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Pinus strobus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Acer rubrum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Fraxinus americana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Rhamnus cathartica</u>	<u>4</u>	<u>No</u>	<u>FAC</u>																	
7. _____	_____	_____	_____																	
		<u>69</u>	=Total Cover	<b>Prevalence Index worksheet:</b>  <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>34</u></td> <td>x 3 = <u>102</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>124</u> (A)</td> <td><u>462</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.73</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>34</u>	x 3 = <u>102</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>124</u> (A)	<u>462</u> (B)	Prevalence Index = B/A = <u>3.73</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>																			
FAC species <u>34</u>	x 3 = <u>102</u>																			
FACU species <u>90</u>	x 4 = <u>360</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>124</u> (A)	<u>462</u> (B)																			
Prevalence Index = B/A = <u>3.73</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Lonicera morrowii</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Rhamnus cathartica</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Quercus alba</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Quercus rubra</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Fraxinus americana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>45</u>	=Total Cover	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Quercus alba</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Rhamnus cathartica</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>10</u>	=Total Cover	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover	<b>Hydrophytic Vegetation Present?</b> Yes <u>        </u> No <u>  X  </u>																

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

## SOIL

Sampling Point: UPL CE-8

[illegible]





**Upland CE-8 View facing southeast**



**Upland CE-8 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CF-3  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-52.09N Long: 73-22-55.75W Datum: WGS 84  
 Soil Map Unit Name: HWE - Hudson and vergennes, steep and very steep 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CF-3</u>
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.) Palustrine Forested Wetland. Efinger classification: Red-maple Hardwood Swamp.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <u>X</u> 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CF-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fraxinus americana</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>60.0%</u> (A/B)																
2. <u>Acer rubrum</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>85</u> =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Lonicera morrowii</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	<b>Prevalence Index worksheet:</b>  <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>55</u></td> <td>x 2 = <u>110</u></td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>106</u></td> <td>x 4 = <u>424</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>231</u> (A)</td> <td><u>744</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.22</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>55</u>	x 2 = <u>110</u>	FAC species <u>70</u>	x 3 = <u>210</u>	FACU species <u>106</u>	x 4 = <u>424</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>231</u> (A)	<u>744</u> (B)	Prevalence Index = B/A = <u>3.22</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>55</u>	x 2 = <u>110</u>																			
FAC species <u>70</u>	x 3 = <u>210</u>																			
FACU species <u>106</u>	x 4 = <u>424</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>231</u> (A)	<u>744</u> (B)																			
Prevalence Index = B/A = <u>3.22</u>																				
2. <u>Cornus racemosa</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Rhamnus cathartica</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>55</u> =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Onoclea sensibilis</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Solidago rugosa</u>	<u>15</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Lonicera morrowii</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Acer rubrum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Fraxinus americana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Inula helenium</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>91</u> =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CF-3

[illegible]





**Wetland CF-3 View facing north**



**Wetland CF-3 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washinton Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CF-3  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43°43'51.71"N Long: 73°22'55.30"W Datum: WGS 84  
 Soil Map Unit Name: HWE - Hudson and vergennes, steep and very steep 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional Shrubland.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> 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 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 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)	
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CF-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhamnus cathartica</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>37.5%</u> (A/B)																
2. <u>Juniperus virginiana</u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Acer saccharum</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>21</u>		<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <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>89</u></td> <td>x 3 = <u>267</u></td> </tr> <tr> <td>FACU species <u>102</u></td> <td>x 4 = <u>408</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>201</u> (A)</td> <td><u>710</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.53</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>89</u>	x 3 = <u>267</u>	FACU species <u>102</u>	x 4 = <u>408</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>201</u> (A)	<u>710</u> (B)	Prevalence Index = B/A = <u>3.53</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>89</u>	x 3 = <u>267</u>																			
FACU species <u>102</u>	x 4 = <u>408</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>201</u> (A)	<u>710</u> (B)																			
Prevalence Index = B/A = <u>3.53</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Lonicera morrowii</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Rhamnus cathartica</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Cornus racemosa</u>	<u>15</u>	<u>No</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>80</u>		<u>=Total Cover</u>																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Solidago rugosa</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lonicera morrowii</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Fraxinus americana</u>	<u>12</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u>Lotus corniculatus</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Rhamnus cathartica</u>	<u>8</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Geum aleppicum</u>	<u>6</u>	<u>No</u>	<u>FAC</u>																	
8. <u>Rubia perigrina</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
9. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
10. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
11. <u>Polystichum acrostichoides</u>	<u>6</u>	<u>No</u>	<u>FACU</u>																	
12. _____	_____	_____	_____																	
<u>100</u>		<u>=Total Cover</u>																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>        </u>		<u>=Total Cover</u>																		

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

## SOIL

Sampling Point: UPL CF-3

[illegible]





**Upland CF-3 View facing west**



**Upland CF-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CG-4  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-49.45N Long: 73-23-15.21W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CG-4</u>
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.) Palustrine Scrub Shrub Wetland. Efinger classification: Shrub Swamp.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> 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)
<b>Field Observations:</b> 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>6</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CG-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhamnus cathartica</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  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>Fraxinus americana</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>10</u>	=Total Cover																	
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>13</u></td> <td>x 1 = <u>13</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>97</u></td> <td>x 3 = <u>291</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>205</u> (A)</td> <td><u>584</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.85</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>13</u>	x 1 = <u>13</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>97</u>	x 3 = <u>291</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>205</u> (A)	<u>584</u> (B)	Prevalence Index = B/A = <u>2.85</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>13</u>	x 1 = <u>13</u>																			
FACW species <u>50</u>	x 2 = <u>100</u>																			
FAC species <u>97</u>	x 3 = <u>291</u>																			
FACU species <u>45</u>	x 4 = <u>180</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>205</u> (A)	<u>584</u> (B)																			
Prevalence Index = B/A = <u>2.85</u>																				
2. <u>Cornus amomum</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Lonicera morrowii</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Rhamnus cathartica</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Acer negundo</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Pinus strobus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. _____	_____	_____	_____																	
		<u>100</u>	=Total Cover																	
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Solidago rugosa</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Symphyotrichum ericoides</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Solidago gigantea</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Symphyotrichum novae-angliae</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Phalaris arundinacea</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Lythrum salicaria</u>	<u>8</u>	<u>No</u>	<u>OBL</u>																	
7. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Eutrochium maculatum</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
9. <u>Equisetum arvense</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>95</u>	=Total Cover																	
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover																	

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

## SOIL

Sampling Point: WET CG-4

[illegible]



**Wetland CG-4 View facing northeast**



**Wetland CG-4 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CG-4  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope/roadside Local relief (concave, convex, none): Convex Slope %: 5  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-49.23N Long: 73-23-15.28W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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 CG-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fraxinus americana</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>16.7%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>10</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">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>17</u></td> <td>x 3 = <u>51</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>137</u> (A)</td> <td><u>561</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.09</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>17</u>	x 3 = <u>51</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>137</u> (A)	<u>561</u> (B)	Prevalence Index = B/A = <u>4.09</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>																			
FAC species <u>17</u>	x 3 = <u>51</u>																			
FACU species <u>90</u>	x 4 = <u>360</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>137</u> (A)	<u>561</u> (B)																			
Prevalence Index = B/A = <u>4.09</u>																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15'</u> )																				
1. <u>Rhamnus cathartica</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Pinus strobus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>20</u>	<u>=Total Cover</u>																		
<b>Herb Stratum</b> (Plot size: <u>5'</u> )																				
1. <u>Lotus corniculatus</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Pastinaca sativa</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Cirsium arvense</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Cichorium intybus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Lolium pratense</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Vicia cracca</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Solidago canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Rhamnus cathartica</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>107</u>	<u>=Total Cover</u>																		
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

## SOIL

Sampling Point: UPL CG-4

[illegible]





Source: Google earth

**Upland CG-4 View facing east**



**Upland CG-4 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CH-3  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-33.55N Long: 73-23-19.90W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near flag CH-3</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> 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>10</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: This wetland receives hydrology from the existing roadside drainage culvert.			

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

 Sampling Point: WET CH-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>6</u></td> <td>x 1 = <u>6</u></td> </tr> <tr> <td>FACW species <u>75</u></td> <td>x 2 = <u>150</u></td> </tr> <tr> <td>FAC species <u>2</u></td> <td>x 3 = <u>6</u></td> </tr> <tr> <td>FACU species <u>17</u></td> <td>x 4 = <u>68</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>255</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.43</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>6</u>	x 1 = <u>6</u>	FACW species <u>75</u>	x 2 = <u>150</u>	FAC species <u>2</u>	x 3 = <u>6</u>	FACU species <u>17</u>	x 4 = <u>68</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>105</u> (A)	<u>255</u> (B)	Prevalence Index = B/A = <u>2.43</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>6</u>	x 1 = <u>6</u>																			
FACW species <u>75</u>	x 2 = <u>150</u>																			
FAC species <u>2</u>	x 3 = <u>6</u>																			
FACU species <u>17</u>	x 4 = <u>68</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>105</u> (A)	<u>255</u> (B)																			
Prevalence Index = B/A = <u>2.43</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Rhamnus cathartica</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Phalaris arundinacea</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Symphyotrichum novae-angliae</u>	<u>15</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Lythrum salicaria</u>	<u>6</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Cirsium arvense</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Achillea millefolium</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
       Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No \_\_\_\_\_

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

## SOIL

Sampling Point: WET CH-3

[illegible]





**Wetland CH-3 View facing north**



**Wetland CH-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CH-3  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-33.47N Long: 73-23-19.76W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CH-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>25.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>415</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.95</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>35</u>	x 3 = <u>105</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>105</u> (A)	<u>415</u> (B)	Prevalence Index = B/A = <u>3.95</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>																			
FAC species <u>35</u>	x 3 = <u>105</u>																			
FACU species <u>40</u>	x 4 = <u>160</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>105</u> (A)	<u>415</u> (B)																			
Prevalence Index = B/A = <u>3.95</u>																				
_____ =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Setaria pumila</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Pastinaca sativa</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Rubia peregrina</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>																	
4. <u>Lotus corniculatus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Cirsium arvense</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Cichorium intybus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ 5 =Total Cover																				

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

## SOIL

Sampling Point: UPL CH-3

[illegible]



**Upland CH-3 View facing west**



**Upland CH-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washinton Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CI-4  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 4  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-33.84N Long: 73-23-23.37W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CI-4</u>
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.) Palustrine Emergent Marsh. Edinger classification: Shallow Emergent Marsh	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input 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"/> 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>7</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Adjacent to stream CS8.		

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

 Sampling Point: WET CI-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Scirpus atrovirens</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Juncus effusus</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Mentha arvensis</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>	
4. <u>Eupatorium perfoliatum</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
5. <u>Lythrum salicaria</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	
6. <u>Juncus tenuis</u>	<u>8</u>	<u>No</u>	<u>FAC</u>	
7. <u>Symphyotrichum novae-angliae</u>	<u>8</u>	<u>No</u>	<u>FACW</u>	
8. <u>Lycopus americanus</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
9. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
10. <u>Symphyotrichum ericoides</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
11. <u>Rubia perigrina</u>	<u>2</u>	<u>No</u>	<u>UPL</u>	
12. _____	_____	_____	_____	
		105 =Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
		=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>55</u>	x 1 = <u>55</u>
FACW species <u>33</u>	x 2 = <u>66</u>
FAC species <u>13</u>	x 3 = <u>39</u>
FACU species <u>2</u>	x 4 = <u>8</u>
UPL species <u>2</u>	x 5 = <u>10</u>
Column Totals: <u>105</u> (A)	<u>178</u> (B)
Prevalence Index = B/A = <u>1.70</u>	

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CI-4

[illegible]





**Wetland CI-4 View facing southeast**



**Wetland CI-4 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CI-4  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 8  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-33.58N Long: 73-23-23.53W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Pastureland / Successional Old Field	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CI-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>4</u></td> <td>x 1 = <u>4</u></td> </tr> <tr> <td>FACW species <u>8</u></td> <td>x 2 = <u>16</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>60</u></td> <td>x 5 = <u>300</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>424</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.24</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>4</u>	x 1 = <u>4</u>	FACW species <u>8</u>	x 2 = <u>16</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>60</u>	x 5 = <u>300</u>	Column Totals: <u>100</u> (A)	<u>424</u> (B)	Prevalence Index = B/A = <u>4.24</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>4</u>	x 1 = <u>4</u>																			
FACW species <u>8</u>	x 2 = <u>16</u>																			
FAC species <u>8</u>	x 3 = <u>24</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>60</u>	x 5 = <u>300</u>																			
Column Totals: <u>100</u> (A)	<u>424</u> (B)																			
Prevalence Index = B/A = <u>4.24</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Rubia peregriana</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>																	
2. <u>Pastinaca sativa</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Lolium pratense</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Symphyotrichum novae-angliae</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Equisetum arvense</u>	<u>8</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Solidago canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Lythrum salicaria</u>	<u>4</u>	<u>No</u>	<u>OBL</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CI-4

[illegible]





**Upland CI-4 View facing west/southwest**



**Upland CI-4 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CJ-4  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-31.21N Long: 73-23-43.60W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CJ-4</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <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) _____ 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) _____ FAC-Neutral Test (D5)		<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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) <u>X</u> Microtopographic Relief (D4)
<b>Field Observations:</b> 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>12</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Adjacent to streams CS9 and CS10. Stream CS10 feeds into Wetland CJ.		

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

Sampling Point: WET CJ-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Thuja occidentalis</i></u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b>  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><i>Rhamnus cathartica</i></u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>15</u>	=Total Cover	<b>Prevalence Index worksheet:</b>  <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>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>53</u></td> <td>x 3 = <u>159</u></td> </tr> <tr> <td>FACU species <u>31</u></td> <td>x 4 = <u>124</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>139</u> (A)</td> <td><u>403</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.90</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>53</u>	x 3 = <u>159</u>	FACU species <u>31</u>	x 4 = <u>124</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>139</u> (A)	<u>403</u> (B)	Prevalence Index = B/A = <u>2.90</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>45</u>	x 2 = <u>90</u>																			
FAC species <u>53</u>	x 3 = <u>159</u>																			
FACU species <u>31</u>	x 4 = <u>124</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>139</u> (A)	<u>403</u> (B)																			
Prevalence Index = B/A = <u>2.90</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u><i>Lonicera morrowii</i></u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u><i>Rhamnus cathartica</i></u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u><i>Rubus occidentalis</i></u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>18</u>	=Total Cover	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u><i>Solidago rugosa</i></u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u><i>Solidago gigantea</i></u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u><i>Equisetum arvense</i></u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u><i>Fragaria virginiana</i></u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u><i>Geranium robertianum</i></u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
6. <u><i>Onoclea sensibilis</i></u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
7. <u><i>Lythrum salicaria</i></u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
8. <u><i>Symphyotrichum novae-angliae</i></u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
9. <u><i>Symphyotrichum ericoides</i></u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
10. <u><i>Rhamnus cathartica</i></u>	<u>3</u>	<u>No</u>	<u>FAC</u>																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>106</u>	=Total Cover	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																

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

## SOIL

Sampling Point: WET CJ-4

[illegible]



**Wetland CJ-4 View facing southeast**



**Wetland CJ-4 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CJ-4  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-30.65N Long: 73-23-43.94W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional Northern Hardwoods.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CJ-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Pinus strobus</i></u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>37.5%</u> (A/B)																
2. <u><i>Betula lenta</i></u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u><i>Fraxinus americana</i></u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
4. <u><i>Rhamnus cathartica</i></u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>80</u> =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u><i>Thuja occidentalis</i></u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>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>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>26</u></td> <td>x 3 = <u>78</u></td> </tr> <tr> <td>FACU species <u>96</u></td> <td>x 4 = <u>384</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>147</u> (A)</td> <td><u>527</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.59</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>26</u>	x 3 = <u>78</u>	FACU species <u>96</u>	x 4 = <u>384</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>147</u> (A)	<u>527</u> (B)	Prevalence Index = B/A = <u>3.59</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>26</u>	x 3 = <u>78</u>																			
FACU species <u>96</u>	x 4 = <u>384</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>147</u> (A)	<u>527</u> (B)																			
Prevalence Index = B/A = <u>3.59</u>																				
2. <u><i>Rhamnus cathartica</i></u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u><i>Pinus strobus</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u><i>Ribes cynosbati</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>45</u> =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u><i>Onoclea sensibilis</i></u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Athyrium filix-femina</i></u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u><i>Geranium robertianum</i></u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
4. <u><i>Symphyotrichum ericoides</i></u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
5. <u><i>Fraxinus americana</i></u>	<u>1</u>	<u>No</u>	<u>FACU</u>																	
6. <u><i>Rhamnus cathartica</i></u>	<u>1</u>	<u>No</u>	<u>FAC</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>17</u> =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u><i>Vitis aestivalis</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
<u>5</u> =Total Cover																				

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

## SOIL

Sampling Point: UPL CJ-4

[illegible]



**Upland CJ-4 View facing west**



**Upland CJ-4 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CK-8  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear Ditch Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-30.88N Long: 73-23-49.58W Datum: WGS 84  
 Soil Map Unit Name: HLE - Hollis-Charlton association, moderately steep and steep 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CK-8</u>
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.) Palustrine Emergent Marsh. Edinger classification: Purple Loosestrife Marsh. From Wetland flag CK-13 the wetland is dominated by narrow-leaf cattail, gray dogwood and purple loosestrife.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> 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) <input checked="" type="checkbox"/> Other (Explain in Remarks) _____ 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)	_____ Surface Soil Cracks (B6) <input checked="" type="checkbox"/> 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) <input checked="" type="checkbox"/> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0.5</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland CK is connect to Wetland CJ via stream CS10.		

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

 Sampling Point: WET CK-8

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>60.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>56</u></td> <td>x 1 = <u>56</u></td> </tr> <tr> <td>FACW species <u>18</u></td> <td>x 2 = <u>36</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>109</u> (A)</td> <td><u>227</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.08</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>56</u>	x 1 = <u>56</u>	FACW species <u>18</u>	x 2 = <u>36</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>109</u> (A)	<u>227</u> (B)	Prevalence Index = B/A = <u>2.08</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>56</u>	x 1 = <u>56</u>																			
FACW species <u>18</u>	x 2 = <u>36</u>																			
FAC species <u>15</u>	x 3 = <u>45</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>109</u> (A)	<u>227</u> (B)																			
Prevalence Index = B/A = <u>2.08</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Pinus strobus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lythrum salicaria</u>	<u>45</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Phalaris arundinacea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Rubia peregrina</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
4. <u>Juncus tenuis</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
5. <u>Symphyotrichum novae-angliae</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Euthamia graminifolia</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Juncus effusus</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
8. <u>Symphyotrichum ericoides</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Scirpus atrovirens</u>	<u>4</u>	<u>No</u>	<u>OBL</u>																	
10. <u>Carex lurida</u>	<u>2</u>	<u>No</u>	<u>OBL</u>																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

**Dominance Test worksheet:**  
  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
  
 Total Number of Dominant Species Across All Strata: 5 (B)  
  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

**Prevalence Index worksheet:**  
  

Total % Cover of:	Multiply by:
OBL species <u>56</u>	x 1 = <u>56</u>
FACW species <u>18</u>	x 2 = <u>36</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>109</u> (A)	<u>227</u> (B)
Prevalence Index = B/A = <u>2.08</u>	

**Hydrophytic Vegetation Indicators:**  
  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No



## SOIL

Sampling Point: WET CK-8

[illegible]



**Wetland CK-8 View facing west**



**Wetland CK-8 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CK-8  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-31.06N Long: 73-23-49.56W Datum: WGS 84  
 Soil Map Unit Name: HLE - Hollis-Charlton association, moderately steep and steep 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Cropland Fieldcrop / Pastureland	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CK-8

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Phleum pratense</u>	<u>45</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Setaria pumila</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Rubia peregrina</u>	<u>15</u>	<u>No</u>	<u>UPL</u>	
4. <u>Dactylis glomerata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
5. <u>Prunella vulgaris</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
6. <u>Cichorium intybus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
		<u>100</u> =Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
		=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 2 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>25</u>	x 3 = <u>75</u>
FACU species <u>60</u>	x 4 = <u>240</u>
UPL species <u>15</u>	x 5 = <u>75</u>
Column Totals: <u>100</u> (A)	<u>390</u> (B)
Prevalence Index = B/A = <u>3.90</u>	

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

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

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**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 CK-8

[illegible]





**Upland CK-8 View facing northwest**



**Upland CK-8 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CL-7  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-19.83N Long: 73-24-22.49W Datum: WGS 84  
 Soil Map Unit Name: RPC - Rock outcrop-Vergennes association, gently sloping through moderately steep 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CL-7</u>
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.) Palustrine Scrub Shrub Wetland. Efinger classification: Shrub Swamp.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <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) _____ 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)		<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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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>8</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Adjacent to stream CS11.		

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

 Sampling Point: WET CL-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fraxinus americana</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>60.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>8</u></td> <td>x 1 = <u>8</u></td> </tr> <tr> <td>FACW species <u>72</u></td> <td>x 2 = <u>144</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>205</u> (A)</td> <td><u>572</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.79</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>8</u>	x 1 = <u>8</u>	FACW species <u>72</u>	x 2 = <u>144</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>205</u> (A)	<u>572</u> (B)	Prevalence Index = B/A = <u>2.79</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>8</u>	x 1 = <u>8</u>																			
FACW species <u>72</u>	x 2 = <u>144</u>																			
FAC species <u>80</u>	x 3 = <u>240</u>																			
FACU species <u>45</u>	x 4 = <u>180</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>205</u> (A)	<u>572</u> (B)																			
Prevalence Index = B/A = <u>2.79</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Cornus amomum</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Rhamnus cathartica</u>	<u>15</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Acer rubrum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>100</u>	<u>=Total Cover</u>																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Osmundastrum cinnamomeum</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Solidago canadensis</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Lysimachia nummularia</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Lythrum salicaria</u>	<u>8</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Alliaria petiolata</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Euthamia graminifolia</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. <u>Impatiens capensis</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>100</u>	<u>=Total Cover</u>																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>=Total Cover</u>																			

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

## SOIL

Sampling Point: WET CL-7

[illegible]





**Wetland CL-7 View facing north**



**Wetland CL-7 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL - CL-7  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-19.48N Long: 73-24-22.39W Datum: WGS 84  
 Soil Map Unit Name: RPC - Rock outcrop-Vergennes association, gently sloping through moderately steep 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 - CL-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>2</u></td> <td>x 3 = <u>6</u></td> </tr> <tr> <td>FACU species <u>63</u></td> <td>x 4 = <u>252</u></td> </tr> <tr> <td>UPL species <u>23</u></td> <td>x 5 = <u>115</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>377</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.19</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>2</u>	x 3 = <u>6</u>	FACU species <u>63</u>	x 4 = <u>252</u>	UPL species <u>23</u>	x 5 = <u>115</u>	Column Totals: <u>90</u> (A)	<u>377</u> (B)	Prevalence Index = B/A = <u>4.19</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>2</u>	x 2 = <u>4</u>																			
FAC species <u>2</u>	x 3 = <u>6</u>																			
FACU species <u>63</u>	x 4 = <u>252</u>																			
UPL species <u>23</u>	x 5 = <u>115</u>																			
Column Totals: <u>90</u> (A)	<u>377</u> (B)																			
Prevalence Index = B/A = <u>4.19</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Poa pratensis</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Rubia peregrina</u>	<u>15</u>	<u>No</u>	<u>UPL</u>																	
3. <u>Pastinaca sativa</u>	<u>8</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Taraxacum officinale</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Lotus corniculatus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Lysimachia nummularia</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Toxicodendron radicans</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>90</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

## SOIL

Sampling Point: UPL - CL-7

[illegible]



**Upland CL-7 View facing west**



**Upland CL-7 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CM-3  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.88N Long: 73-24-42.13W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CM-3</u>
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.) Palustrine Emergent Marsh. Etinger classification: Shallow Emergent Marsh	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input 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"/> 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 checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>10</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Adjacent to stream CS12.			



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

 Sampling Point: WET CM-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhamnus cathartica</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  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. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>65</u></td> <td>x 1 = <u>65</u></td> </tr> <tr> <td>FACW species <u>14</u></td> <td>x 2 = <u>28</u></td> </tr> <tr> <td>FAC species <u>39</u></td> <td>x 3 = <u>117</u></td> </tr> <tr> <td>FACU species <u>28</u></td> <td>x 4 = <u>112</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>146</u> (A)</td> <td><u>322</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.21</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>65</u>	x 1 = <u>65</u>	FACW species <u>14</u>	x 2 = <u>28</u>	FAC species <u>39</u>	x 3 = <u>117</u>	FACU species <u>28</u>	x 4 = <u>112</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>146</u> (A)	<u>322</u> (B)	Prevalence Index = B/A = <u>2.21</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>65</u>	x 1 = <u>65</u>																			
FACW species <u>14</u>	x 2 = <u>28</u>																			
FAC species <u>39</u>	x 3 = <u>117</u>																			
FACU species <u>28</u>	x 4 = <u>112</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>146</u> (A)	<u>322</u> (B)																			
Prevalence Index = B/A = <u>2.21</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Rhamnus cathartica</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Cornus racemosa</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Cornus amomum</u>	<u>8</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>31</u>	<u>=Total Cover</u>																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lythrum salicaria</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Carex vulpinoidea</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Equisetum arvense</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Inula helenium</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Cornus racemosa</u>	<u>6</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Cornus amomum</u>	<u>6</u>	<u>No</u>	<u>FACW</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>105</u>	<u>=Total Cover</u>																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		

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

## SOIL

Sampling Point: WET CM-3

[illegible]



**Wetland CM-3 View facing north**



**Wetland CM-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CM-3  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.78N Long: 73-24-42.13W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CM-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Juniperus virginiana</u>	10	Yes	FACU	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>16.7%</u> (A/B)																
2. <u>Fraxinus americana</u>	5	Yes	FACU																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	15	=Total Cover		<b>Prevalence Index worksheet:</b>  <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>53</u></td> <td>x 3 = <u>159</u></td> </tr> <tr> <td>FACU species <u>55</u></td> <td>x 4 = <u>220</u></td> </tr> <tr> <td>UPL species <u>45</u></td> <td>x 5 = <u>225</u></td> </tr> <tr> <td>Column Totals: <u>153</u> (A)</td> <td><u>604</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.95</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>53</u>	x 3 = <u>159</u>	FACU species <u>55</u>	x 4 = <u>220</u>	UPL species <u>45</u>	x 5 = <u>225</u>	Column Totals: <u>153</u> (A)	<u>604</u> (B)	Prevalence Index = B/A = <u>3.95</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>																			
FAC species <u>53</u>	x 3 = <u>159</u>																			
FACU species <u>55</u>	x 4 = <u>220</u>																			
UPL species <u>45</u>	x 5 = <u>225</u>																			
Column Totals: <u>153</u> (A)	<u>604</u> (B)																			
Prevalence Index = B/A = <u>3.95</u>																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15'</u> )																				
1. <u>Rubus occidentalis</u>	20	Yes	UPL																	
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	20	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>5'</u> )																				
1. <u>Setaria pumila</u>	45	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Poa pratensis</u>	25	Yes	FACU																	
3. <u>Pastinaca sativa</u>	25	Yes	UPL																	
4. <u>Cichorium intybus</u>	10	No	FACU																	
5. <u>Toxicodendron radicans</u>	8	No	FAC																	
6. <u>Parthenocissus quinquefolia</u>	5	No	FACU																	
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
	118	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )																				
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
		=Total Cover		<b>Hydrophytic Vegetation Present?</b> Yes <u>        </u> No <u>  X  </u>																

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



## SOIL

Sampling Point: UPL CM-3

[illegible]



**Upland CM-3 View facing south**



**Upland CM-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CN-5  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.25N Long: 73-24-50.79W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CN-5</u>
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.) Palustrine Emergent Marsh. Efinger classification: Purple Loosestrife Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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>7</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CN-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>68</u></td> <td>x 1 = <u>68</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>12</u></td> <td>x 3 = <u>36</u></td> </tr> <tr> <td>FACU species <u>8</u></td> <td>x 4 = <u>32</u></td> </tr> <tr> <td>UPL species <u>1</u></td> <td>x 5 = <u>5</u></td> </tr> <tr> <td>Column Totals: <u>104</u> (A)</td> <td><u>171</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.64</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>68</u>	x 1 = <u>68</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>12</u>	x 3 = <u>36</u>	FACU species <u>8</u>	x 4 = <u>32</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>104</u> (A)	<u>171</u> (B)	Prevalence Index = B/A = <u>1.64</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>68</u>	x 1 = <u>68</u>																			
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FACU species <u>8</u>	x 4 = <u>32</u>																			
UPL species <u>1</u>	x 5 = <u>5</u>																			
Column Totals: <u>104</u> (A)	<u>171</u> (B)																			
Prevalence Index = B/A = <u>1.64</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lythrum salicaria</u>	<u>45</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Carex vulpinoidea</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Symphyotrichum novae-angliae</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Symphyotrichum ericoides</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Equisetum arvense</u>	<u>6</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Euthamia graminifolia</u>	<u>6</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Eupatorium perfoliatum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
8. <u>Scirpus atrovirens</u>	<u>3</u>	<u>No</u>	<u>OBL</u>																	
9. <u>Pastinaca sativa</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>104</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CN-5

[illegible]





**Wetland CN-5 View facing west**



**Wetland CN-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CN-5  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.08N Long: 73-24-51.04W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CN-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 = <u>200</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>410</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.10</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>20</u>	x 3 = <u>60</u>	FACU species <u>50</u>	x 4 = <u>200</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>100</u> (A)	<u>410</u> (B)	Prevalence Index = B/A = <u>4.10</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>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>50</u>	x 4 = <u>200</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>100</u> (A)	<u>410</u> (B)																			
Prevalence Index = B/A = <u>4.10</u>																				
_____ =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Poa pratensis</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Setaria pumila</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Pastinaca sativa</u>	<u>15</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Rubia peregrina</u>	<u>15</u>	<u>No</u>	<u>UPL</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CN-5

[illegible]





**Upland CN-5 View facing west**



**Upland CN-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CO-1  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear Ditch Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.61N Long: 73-24-55.51W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CO-1</u>
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.) Palustrine Emergent Wetland. Edinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CO-1

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Carex vulpinoidea</u>	<u>35</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Lythrum salicaria</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Rubia perigrina</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	
4. <u>Symphotrichum ericoides</u>	<u>8</u>	<u>No</u>	<u>FACU</u>	
5. <u>Eupatorium perfoliatum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
6. <u>Pastinaca sativa</u>	<u>2</u>	<u>No</u>	<u>UPL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	_____	=Total Cover		

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

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>65</u>	x 1 = <u>65</u>
FACW species <u>5</u>	x 2 = <u>10</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>8</u>	x 4 = <u>32</u>
UPL species <u>22</u>	x 5 = <u>110</u>
Column Totals: <u>100</u> (A)	<u>217</u> (B)
Prevalence Index = B/A = <u>2.17</u>	

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
         Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CO-1

[illegible]



**Wetland CO-1 View facing northwest**



**Wetland CO-1 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CO-1  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.54N Long: 73-24-55.57W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CO-1

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>88</u></td> <td>x 4 = <u>352</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>103</u> (A)</td> <td><u>427</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.15</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>88</u>	x 4 = <u>352</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>103</u> (A)	<u>427</u> (B)	Prevalence Index = B/A = <u>4.15</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>88</u>	x 4 = <u>352</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>103</u> (A)	<u>427</u> (B)																			
Prevalence Index = B/A = <u>4.15</u>																				
_____ =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Poa pratensis</u>	<u>55</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Lotus corniculatus</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Artemisia vulgaris</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Plantago lanceolata</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>103</u> =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Hydrophytic Vegetation Present?</b> Yes <u>        </u> No <u>  X  </u>																				

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

## SOIL

Sampling Point: UPL CO-1

[illegible]



**Upland CO-1 View facing northwest**



**Upland CO-1 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CP-7  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear Ditch Local relief (concave, convex, none): Concave Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-18.68N Long: 73-25-3.73W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CP-7</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <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) _____ 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CP-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>75.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>65</u></td> <td>x 1 = <u>65</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>250</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.27</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>65</u>	x 1 = <u>65</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>110</u> (A)	<u>250</u> (B)	Prevalence Index = B/A = <u>2.27</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>65</u>	x 1 = <u>65</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>25</u>	x 5 = <u>125</u>																			
Column Totals: <u>110</u> (A)	<u>250</u> (B)																			
Prevalence Index = B/A = <u>2.27</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Carex vulpinoidea</u>	<u>45</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Lythrum salicaria</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Rubia perigrina</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
4. <u>Euthamia graminifolia</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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



## SOIL

Sampling Point: WET CP-7

[illegible]



**Wetland CP-7 View facing northwest**



**Wetland CP-7 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CP-7  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-18.70N Long: 73-25-3.89W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CP-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>58</u></td> <td>x 4 = <u>232</u></td> </tr> <tr> <td>UPL species <u>7</u></td> <td>x 5 = <u>35</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>372</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.72</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>35</u>	x 3 = <u>105</u>	FACU species <u>58</u>	x 4 = <u>232</u>	UPL species <u>7</u>	x 5 = <u>35</u>	Column Totals: <u>100</u> (A)	<u>372</u> (B)	Prevalence Index = B/A = <u>3.72</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>																			
FAC species <u>35</u>	x 3 = <u>105</u>																			
FACU species <u>58</u>	x 4 = <u>232</u>																			
UPL species <u>7</u>	x 5 = <u>35</u>																			
Column Totals: <u>100</u> (A)	<u>372</u> (B)																			
Prevalence Index = B/A = <u>3.72</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lotus corniculatus</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Setaria pumila</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Pastinaca sativa</u>	<u>7</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Juniperus virginiana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Medicago lupulina</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
<u>100</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CP-7

[illegible]





**Upland CP-7 View facing northwest**



**Upland CP-7 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CP-14  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-20.75N Long: 73-25-5.74W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CP-14</u>
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.) Palustrine Emergent Marsh with scattered shrubs. Edinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<u>X</u> Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	_____ Marl Deposits (B15)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Dry-Season Water Table (C2)	
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Stunted or Stressed Plants (D1)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)	
<u>X</u> Inundation Visible on Aerial Imagery (B7)	<u>X</u> Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Sparsely Vegetated Concave Surface (B8)		_____ Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>4</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Adjacent to stream CS13.			

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

 Sampling Point: WET CP-14

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. <u>Cornus sericea</u>	<u>8</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Cornus amomum</u>	<u>8</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Lonicera morrowii</u>	<u>3</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	<u>19</u>	=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Leersia oryzoides</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Typha latifolia</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Lythrum salicaria</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	
4. <u>Onoclea sensibilis</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
5. <u>Eupatorium perfoliatum</u>	<u>8</u>	<u>No</u>	<u>FACW</u>	
6. <u>Bidens frondosa</u>	<u>8</u>	<u>No</u>	<u>FACW</u>	
7. <u>Lysimachia nummularia</u>	<u>8</u>	<u>No</u>	<u>FACW</u>	
8. <u>Cyperus esculentus</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
9. <u>Cornus sericea</u>	<u>3</u>	<u>No</u>	<u>FACW</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>107</u>	=Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. <u>Vitis aestivalis</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>10</u>	=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)  
 Total Number of Dominant Species Across All Strata: 5 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>65</u>	x 1 = <u>65</u>
FACW species <u>58</u>	x 2 = <u>116</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>13</u>	x 4 = <u>52</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>136</u> (A)	<u>233</u> (B)
Prevalence Index = B/A = <u>1.71</u>	

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
         Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CP-14

[illegible]





**Wetland CP-14 View facing north**



**Wetland CP-14 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CP-14  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-20.01N Long: 73-25-5.89W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional Old Field.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CP-14

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Tilia americana</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  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. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>10</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>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>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>14</u></td> <td>x 3 = <u>42</u></td> </tr> <tr> <td>FACU species <u>106</u></td> <td>x 4 = <u>424</u></td> </tr> <tr> <td>UPL species <u>12</u></td> <td>x 5 = <u>60</u></td> </tr> <tr> <td>Column Totals: <u>134</u> (A)</td> <td><u>530</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.96</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>14</u>	x 3 = <u>42</u>	FACU species <u>106</u>	x 4 = <u>424</u>	UPL species <u>12</u>	x 5 = <u>60</u>	Column Totals: <u>134</u> (A)	<u>530</u> (B)	Prevalence Index = B/A = <u>3.96</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>2</u>	x 2 = <u>4</u>																			
FAC species <u>14</u>	x 3 = <u>42</u>																			
FACU species <u>106</u>	x 4 = <u>424</u>																			
UPL species <u>12</u>	x 5 = <u>60</u>																			
Column Totals: <u>134</u> (A)	<u>530</u> (B)																			
Prevalence Index = B/A = <u>3.96</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u><i>Lonicera morrowii</i></u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u><i>Rhamnus cathartica</i></u>	<u>6</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u><i>Juniperus virginiana</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>19</u>	<u>=Total Cover</u>																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u><i>Lolium pratense</i></u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Solidago canadensis</i></u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u><i>Pastinaca sativa</i></u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
4. <u><i>Toxicodendron radicans</i></u>	<u>8</u>	<u>No</u>	<u>FAC</u>																	
5. <u><i>Symphyotrichum ericoides</i></u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
6. <u><i>Vicia cracca</i></u>	<u>2</u>	<u>No</u>	<u>UPL</u>																	
7. <u><i>Symphyotrichum novae-angliae</i></u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>100</u>	<u>=Total Cover</u>																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u><i>Vitis aestivalis</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		

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

## SOIL

Sampling Point: UPL CP-14

[illegible]



**Upland CP-14 View facing west/northwest**



**Upland CP-14 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 4/5/22  
 Applicant/Owner: TDI State: NY Sampling Point: CPA-6 Wet  
 Investigator(s): N. Frazer & J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0-1  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-19.07N Long: 73-25-6.65W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Saco silt loam (Sa) NWI classification: PEM/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 _____	<b>Is the Sampled Area within a Wetland?</b> 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.) Shallow emergent marsh/shrub swamp.		

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ 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) <u>X</u> 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Adjacent to stream CS13.		



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

 Sampling Point: CPA-6 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>55</u></td> <td>x 1 = <u>55</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</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>105</u> (A)</td> <td><u>155</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.48</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>55</u>	x 1 = <u>55</u>	FACW species <u>50</u>	x 2 = <u>100</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>105</u> (A)	<u>155</u> (B)	Prevalence Index = B/A = <u>1.48</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>55</u>	x 1 = <u>55</u>																			
FACW species <u>50</u>	x 2 = <u>100</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>105</u> (A)	<u>155</u> (B)																			
Prevalence Index = B/A = <u>1.48</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus amomum</u>	<u>45</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Carex lacustris</u>	<u>55</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. <u>Cornus amomum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

## SOIL

Sampling Point CPA-6 Wet

[illegible]



**Wetland CPA-6- View facing north**



**Wetland CPA-6- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 4/5/22  
 Applicant/Owner: TDI State: NY Sampling Point: CPA-6 Upl  
 Investigator(s): N. Frazer & J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-19.26N Long: 73-25-7.04W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Saco silt loam (Sa) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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: CPA-6 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Ulmus americana</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</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>50.0%</u> (A/B)																
2. <u>Prunus serotina</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Juniperus virginiana</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Rhamnus cathartica</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>14</u>		=Total Cover		<b>Prevalence Index worksheet:</b>  <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>32</u></td> <td>x 3 = <u>96</u></td> </tr> <tr> <td>FACU species <u>110</u></td> <td>x 4 = <u>440</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>147</u> (A)</td> <td><u>546</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.71</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>32</u>	x 3 = <u>96</u>	FACU species <u>110</u>	x 4 = <u>440</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>147</u> (A)	<u>546</u> (B)	Prevalence Index = B/A = <u>3.71</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>32</u>	x 3 = <u>96</u>																			
FACU species <u>110</u>	x 4 = <u>440</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>147</u> (A)	<u>546</u> (B)																			
Prevalence Index = B/A = <u>3.71</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Lonicera tatarica</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
2. <u>Cornus racemosa</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>30</u>		=Total Cover																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>_____</u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Poa pratensis</u>	<u>90</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Solidago canadensis</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>103</u>		=Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____		=Total Cover		<b>Hydrophytic Vegetation Present?</b> Yes <u>_____</u> No <u>X</u>																

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



## SOIL

Sampling Point CPA-6 Upd

[illegible]



**Upland CPA-6- View facing east**



**Upland CPA-6- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CQ-3  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-20.87N Long: 73-25-11.38W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CQ-3</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CQ-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</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>180</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.80</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>80</u>	x 2 = <u>160</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>180</u> (B)	Prevalence Index = B/A = <u>1.80</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>20</u>	x 1 = <u>20</u>																			
FACW species <u>80</u>	x 2 = <u>160</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>180</u> (B)																			
Prevalence Index = B/A = <u>1.80</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Phalaris arundinacea</u>	<u>80</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Typha angustifolia</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>																	
3. _____	_____	_____	_____																	
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																				

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



## SOIL

Sampling Point: WET CQ-3

[illegible]





**Wetland CQ-3 View facing west/northwest**



**Wetland CQ-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
Applicant/Owner: TDI State: NY Sampling Point: WET CQ-6  
Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
Landform (hillside, terrace, etc.): Linear Ditch Local relief (concave, convex, none): Concave Slope %: 1  
Subregion (LRR or MLRA): LRR R Lat: 43-43-22.21N Long: 73-25-17.30W Datum: WGS 84  
Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CQ-6</u>
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.) Palustrine Emergent Marsh. Efinger classification: Purple Loosestrife Marsh.	

### HYDROLOGY

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

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

 Sampling Point: WET CQ-6

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>47</u></td> <td>x 1 = <u>47</u></td> </tr> <tr> <td>FACW species <u>33</u></td> <td>x 2 = <u>66</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>203</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.03</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>47</u>	x 1 = <u>47</u>	FACW species <u>33</u>	x 2 = <u>66</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>100</u> (A)	<u>203</u> (B)	Prevalence Index = B/A = <u>2.03</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>47</u>	x 1 = <u>47</u>																			
FACW species <u>33</u>	x 2 = <u>66</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>100</u> (A)	<u>203</u> (B)																			
Prevalence Index = B/A = <u>2.03</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lythrum salicaria</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Phalaris arundinacea</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Juncus effusus</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Pastinaca sativa</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Symphyotrichum novae-angliae</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Scirpus atrovirens</u>	<u>2</u>	<u>No</u>	<u>OBL</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CQ-6

[illegible]





**Wetland CQ-6 View facing west**



**Wetland CQ-6 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL  
 Investigator(s): C. Scrivner, J. Greaves Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-20.82N Long: 73-25-12.07W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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 _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside. Upland data point for both Wetland data points CQ-3 and CQ-6.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>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>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>350</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.50</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>70</u>	x 3 = <u>210</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>100</u> (A)	<u>350</u> (B)	Prevalence Index = B/A = <u>3.50</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>																			
FAC species <u>70</u>	x 3 = <u>210</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>20</u>	x 5 = <u>100</u>																			
Column Totals: <u>100</u> (A)	<u>350</u> (B)																			
Prevalence Index = B/A = <u>3.50</u>																				
_____ =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Setaria pumila</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Pastinaca sativa</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Toxicodendron radicans</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Plantago lanceolata</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Hydrophytic Vegetation Present?</b> Yes <u>        </u> No <u>  X  </u>																				

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

## SOIL

Sampling Point: UPL

[illegible]



**Upland CQ-3 & CQ-6 View facing west**



**Upland CQ-3 & CQ-6 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CR-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-23.09N Long: 73-25-23.03W Datum: WGS 84  
 Soil Map Unit Name: KbA - Kingsbury silty clay, 0 to 2 percent slopes NWI classification: PEM2

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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CR-3</u>
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.) Palustrine Emergent Marsh. Edinger classification: Shallow Emergent Marsh and Cropland/Fieldcrop. This is area consists of existing hayfield.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</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) _____ 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) <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)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>3</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> 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 CR-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ = Total Cover				<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">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>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> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.00</u></td> </tr> </tbody> </table>	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)	Prevalence Index = B/A = <u>2.00</u>	
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)																			
Prevalence Index = B/A = <u>2.00</u>																				
_____ = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ = Total Cover																				
<u>100</u> = Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>  </u>																

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

## SOIL

Sampling Point: WET CR-3

[illegible]



**Wetland CR-3 View facing southwest**



**Wetland CR-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CR-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 35  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-23.00N Long: 73-25-22.87W Datum: WGS 84  
 Soil Map Unit Name: KbA - Kingsbury silty clay, 0 to 2 percent slopes 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 <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside and Cropland/Fieldcrop.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CR-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>95</u></td> <td>x 2 = <u>190</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>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>215</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.15</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>95</u>	x 2 = <u>190</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>100</u> (A)	<u>215</u> (B)	Prevalence Index = B/A = <u>2.15</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>95</u>	x 2 = <u>190</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>100</u> (A)	<u>215</u> (B)																			
Prevalence Index = B/A = <u>2.15</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u>  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Phalaris arundinacea</u>	<u>95</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Vicia cracca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<u>100</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Hydrophytic Vegetation Present?</b> Yes <u> X </u> No <u>      </u>																				

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



## SOIL

Sampling Point: UPL CR-3

[illegible]



**Upland CR-3 View facing southwest**



**Upland CR-3 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CR-8  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-17.47N Long: 73-25-26.74W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CR-8</u>
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.) Palustrine Emergent Marsh - Cattail Marsh. Edinger classification: Shallow Emergent Marsh. This wetland consists of mowed field areas, roadside ditch and unmowed cattail marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" 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 checked="" type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input checked="" 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>10</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CR-8

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>100</u></td> <td>x 1 = <u>100</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>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>100</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>100</u>	x 1 = <u>100</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>100</u> (B)	Prevalence Index = B/A = <u>1.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>100</u>	x 1 = <u>100</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>100</u> (B)																			
Prevalence Index = B/A = <u>1.00</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Typha angustifolia</u>	<u>97</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Lythrum salicaria</u>	<u>3</u>	<u>No</u>	<u>OBL</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CR-8

[illegible]





**Wetland CR-8 View facing southwest**



**Wetland CR-8 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CR-8  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 40  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-17.48N Long: 73-25-26.61W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 \_\_\_\_\_ No X  
 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CR-8

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</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>100</u> (A)</td> <td><u>260</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.60</u></td> </tr> </table>	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>0</u>	x 3 = <u>0</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>260</u> (B)	Prevalence Index = B/A = <u>2.60</u>	
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Column Totals: <u>100</u> (A)	<u>260</u> (B)																			
Prevalence Index = B/A = <u>2.60</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  </u> <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <u>  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Phalaris arundinacea</u>	<u>70</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Taraxacum officinale</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Cichorium intybus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Lotus corniculatus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Trifolium repens</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CR-8

[illegible]





**Upland CR-8 View facing southwest**



**Upland CR-8 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CR-15  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.56N Long: 73-25-29.67W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam NWI classification: PEM2

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 \_\_\_\_\_ No X  
 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CR-15</u>
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.) Palustrine Emergent Marsh. Edinger classification: Shallow Emergent Marsh. From wetland flag CR-12 south to the end of the wetland consists of this community.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) <u>X</u> 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CR-15

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Salix nigra</u>	<u>3</u>	<u>Yes</u>	<u>OBL</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>10</u> (A)  Total Number of Dominant Species Across All Strata: <u>11</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>90.9%</u> (A/B)																
2. <u>Fraxinus pennsylvanica</u>	<u>2</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Ulmus americana</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>6</u>	=Total Cover	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>51</u></td> <td>x 1 = <u>51</u></td> </tr> <tr> <td>FACW species <u>27</u></td> <td>x 2 = <u>54</u></td> </tr> <tr> <td>FAC species <u>24</u></td> <td>x 3 = <u>72</u></td> </tr> <tr> <td>FACU species <u>12</u></td> <td>x 4 = <u>48</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>114</u> (A)</td> <td><u>225</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.97</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>51</u>	x 1 = <u>51</u>	FACW species <u>27</u>	x 2 = <u>54</u>	FAC species <u>24</u>	x 3 = <u>72</u>	FACU species <u>12</u>	x 4 = <u>48</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>114</u> (A)	<u>225</u> (B)	Prevalence Index = B/A = <u>1.97</u>	
Total % Cover of:	Multiply by:																			
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Column Totals: <u>114</u> (A)	<u>225</u> (B)																			
Prevalence Index = B/A = <u>1.97</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Lonicera morrowii</u>	<u>2</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Ulmus americana</u>	<u>2</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Cornus amomum</u>	<u>2</u>	<u>Yes</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
		<u>8</u>	=Total Cover																	
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Agrostis gigantea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Carex vulpinoidea</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Typha angustifolia</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>																	
4. <u>Scirpus atrovirens</u>	<u>12</u>	<u>Yes</u>	<u>OBL</u>																	
5. <u>Juncus tenuis</u>	<u>12</u>	<u>Yes</u>	<u>FAC</u>																	
6. <u>Cornus racemosa</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Lythrum salicaria</u>	<u>6</u>	<u>No</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>100</u>	=Total Cover																	
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover																	

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

## SOIL

Sampling Point: WET CR-15

[illegible]



**Wetland CR-15 View facing north**



**Wetland CR-15 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CR-15  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 45  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-13.49N Long: 73-25-29.28W Datum: WGS 84  
 Soil Map Unit Name: Sa - Saco silt loam 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 \_\_\_\_\_ No X  
 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional Old Field.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CR-15

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Ulmus americana</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>1</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )				<b>Prevalence Index worksheet:</b>  <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>1</u></td> <td>x 2 = <u>2</u></td> </tr> <tr> <td>FAC species <u>2</u></td> <td>x 3 = <u>6</u></td> </tr> <tr> <td>FACU species <u>92</u></td> <td>x 4 = <u>368</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>426</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.06</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>1</u>	x 2 = <u>2</u>	FAC species <u>2</u>	x 3 = <u>6</u>	FACU species <u>92</u>	x 4 = <u>368</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>105</u> (A)	<u>426</u> (B)	Prevalence Index = B/A = <u>4.06</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>1</u>	x 2 = <u>2</u>																			
FAC species <u>2</u>	x 3 = <u>6</u>																			
FACU species <u>92</u>	x 4 = <u>368</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>105</u> (A)	<u>426</u> (B)																			
Prevalence Index = B/A = <u>4.06</u>																				
1. <u>Rhus typhina</u>	<u>2</u>	<u>No</u>	<u>UPL</u>																	
2. <u>Lonicera morrowii</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>4</u> =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Lolium pratense</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Solidago canadensis</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Symphotrichum ericoides</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Asclepias syriaca</u>	<u>3</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Cornus racemosa</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>100</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.)																				

## SOIL

Sampling Point: UPL CR-15

[illegible]



**Upland CR-15 View facing southeast**



**Upland CR-15 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CS-5  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Roadside swale Local relief (concave, convex, none): Concave Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-10.69N Long: 73-25-30.80W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CS-5</u>
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.) Palustrine Emergent Marsh - Roadside ditch. Edinger classification: Shallow Emergent Marsh. (From flags CS-1 to CS-6). The remainder of this wetland is a cattail marsh community (consisting of the same information on this datasheet but with 80% cattail and 10% purple loosestrife).	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <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) _____ 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) <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)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>13</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CS-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>58</u></td> <td>x 1 = <u>58</u></td> </tr> <tr> <td>FACW species <u>34</u></td> <td>x 2 = <u>68</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>6</u></td> <td>x 4 = <u>24</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>98</u> (A)</td> <td><u>150</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.53</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>58</u>	x 1 = <u>58</u>	FACW species <u>34</u>	x 2 = <u>68</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>6</u>	x 4 = <u>24</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>98</u> (A)	<u>150</u> (B)	Prevalence Index = B/A = <u>1.53</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>58</u>	x 1 = <u>58</u>																			
FACW species <u>34</u>	x 2 = <u>68</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>6</u>	x 4 = <u>24</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>98</u> (A)	<u>150</u> (B)																			
Prevalence Index = B/A = <u>1.53</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus amomum</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
2. <u>Lonicera morrowii</u>	<u>1</u>	<u>No</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Typha angustifolia</u>	<u>50</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Phalaris arundinacea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Lythrum salicaria</u>	<u>8</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Symphotrichum ericoides</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Cornus amomum</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
       Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No \_\_\_\_\_

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



## SOIL

Sampling Point: WET CS-5

[illegible]



**Wetland CS-5 View facing south/southwest**



**Wetland CS-5 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CS-5  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 40  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-10.65N Long: 73-25-30.56W Datum: WGS 84  
 Soil Map Unit Name: VeD - Vergennes silty clay loam, 12 to 20 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CS-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>35</u></td> <td>x 2 = <u>70</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>335</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.35</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>35</u>	x 2 = <u>70</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>100</u> (A)	<u>335</u> (B)	Prevalence Index = B/A = <u>3.35</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>35</u>	x 2 = <u>70</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>60</u>	x 4 = <u>240</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>100</u> (A)	<u>335</u> (B)																			
Prevalence Index = B/A = <u>3.35</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lolium pratense</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Phalaris arundinacea</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Lotus corniculatus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Vicia cracca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>100</u> =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

## SOIL

Sampling Point: UPL CS-5

[illegible]





**Upland CS-5 View facing north/northeast**



**Upland CS-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CT-7  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Roadside swale Local relief (concave, convex, none): Convex Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-7.40N Long: 73-25-32.60W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CT-7</u>
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.) Palustrine Emergent Marsh - Cattail Marsh. Edinger classification: Shallow Emergent Marsh. Portions of this wetland are periodically mowed.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<u>X</u> Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	_____ Marl Deposits (B15)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	<u>X</u> Dry-Season Water Table (C2)	
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Stunted or Stressed Plants (D1)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)	
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Sparsely Vegetated Concave Surface (B8)		_____ Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CT-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>99</u></td> <td>x 1 = <u>99</u></td> </tr> <tr> <td>FACW species <u>1</u></td> <td>x 2 = <u>2</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>101</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.01</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>99</u>	x 1 = <u>99</u>	FACW species <u>1</u>	x 2 = <u>2</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>101</u> (B)	Prevalence Index = B/A = <u>1.01</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>99</u>	x 1 = <u>99</u>																			
FACW species <u>1</u>	x 2 = <u>2</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>101</u> (B)																			
Prevalence Index = B/A = <u>1.01</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Typha angustifolia</u>	<u>90</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Lythrum salicaria</u>	<u>9</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Symphyotrichum novae-angliae</u>	<u>1</u>	<u>No</u>	<u>FACW</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																				

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

## SOIL

Sampling Point: WET CT-7

[illegible]





**Wetland CT-7 View facing south/southwest**



**Wetland CT-7 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CT-7  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 45  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-7.29N Long: 73-25-32.53W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CT-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>55</u></td> <td>x 4 = <u>220</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>350</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.68</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>35</u>	x 3 = <u>105</u>	FACU species <u>55</u>	x 4 = <u>220</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>95</u> (A)	<u>350</u> (B)	Prevalence Index = B/A = <u>3.68</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>95</u> (A)	<u>350</u> (B)																			
Prevalence Index = B/A = <u>3.68</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lolium pratense</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Setaria pumila</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Lotus corniculatus</u>	<u>5</u>	<u>No</u>	_____																	
4. <u>Trifolium repens</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Cichorium intybus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <u>        </u> No <u>  X  </u>																

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

## SOIL

Sampling Point: UPL CT-7

[illegible]



**Upland CT-7 View facing south/southwest**



**Upland CT-7 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CU-5  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Conave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-3.76N Long: 73-25-35.57W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CU-5</u>
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.) Palustrine Emergent Marsh dominated by purple loosestrife. Edinger classification: Purple Loosestrife Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<u>X</u> Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	_____ Marl Deposits (B15)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	<u>X</u> Dry-Season Water Table (C2)	
_____ Sediment Deposits (B2)	<u>X</u> Oxidized Rhizospheres on Living Roots (C3)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Stunted or Stressed Plants (D1)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)	
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Sparsely Vegetated Concave Surface (B8)		_____ Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>8</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CU-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>95</u></td> <td>x 1 = <u>95</u></td> </tr> <tr> <td>FACW species <u>22</u></td> <td>x 2 = <u>44</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</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>122</u> (A)</td> <td><u>159</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.30</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>95</u>	x 1 = <u>95</u>	FACW species <u>22</u>	x 2 = <u>44</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>122</u> (A)	<u>159</u> (B)	Prevalence Index = B/A = <u>1.30</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>95</u>	x 1 = <u>95</u>																			
FACW species <u>22</u>	x 2 = <u>44</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>122</u> (A)	<u>159</u> (B)																			
Prevalence Index = B/A = <u>1.30</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus amomum</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Quercus bicolor</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Ulmus americana</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lythrum salicaria</u>	<u>85</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Leersia oryzoides</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Epilobium coloratum</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Symphyotrichum novae-angliae</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

**Definitions of Vegetation Strata:**

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

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

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

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

**Hydrophytic Vegetation Present?**      Yes X      No

## SOIL

Sampling Point: WET CU-5

[illegible]



**Wetland CU-5 View facing southwest**



**Wetland CU-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CU-5  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 45  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-3.65N Long: 73-25-35.26W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CU-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>45</u></td> <td>x 3 = <u>135</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 = <u>200</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>340</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.40</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>45</u>	x 3 = <u>135</u>	FACU species <u>50</u>	x 4 = <u>200</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>340</u> (B)	Prevalence Index = B/A = <u>3.40</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>45</u>	x 3 = <u>135</u>																			
FACU species <u>50</u>	x 4 = <u>200</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>340</u> (B)																			
Prevalence Index = B/A = <u>3.40</u>																				
_____ =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Setaria pumila</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Poa pratensis</u>	<u>45</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Cichorium intybus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ =Total Cover																				

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



## SOIL

Sampling Point: UPL CU-5

[illegible]



**Upland CU-5 View facing north/northeast**



**Upland CU-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CV-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Conave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-2.99N Long: 73-25-36.07W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CV-3</u>
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.) Palustrine Emergent Marsh dominated by purple loosestrife and cattail. Edinger classification: Purple Loosestrife Marsh. Most of this wetland is mowed periodically.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</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) _____ 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>8</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CV-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>95</u></td> <td>x 1 = <u>95</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</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>105</u> (A)</td> <td><u>125</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.19</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>95</u>	x 1 = <u>95</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>125</u> (B)	Prevalence Index = B/A = <u>1.19</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>95</u>	x 1 = <u>95</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>105</u> (A)	<u>125</u> (B)																			
Prevalence Index = B/A = <u>1.19</u>																				
_____ =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Typha angustifolia</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Lythrum salicaria</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Juncus tenuis</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Carex vulpinoidea</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Agrostis gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CV-3

[illegible]





**Wetland CV-3 View facing north**



**Wetland CV-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CV-3  
 Investigator(s): J.Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 45  
 Subregion (LRR or MLRA): LRR R Lat: 43-43-2.98N Long: 73-25-35.85W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CV-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>375</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.75</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>40</u>	x 3 = <u>120</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>100</u> (A)	<u>375</u> (B)	Prevalence Index = B/A = <u>3.75</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>																			
FAC species <u>40</u>	x 3 = <u>120</u>																			
FACU species <u>45</u>	x 4 = <u>180</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>100</u> (A)	<u>375</u> (B)																			
Prevalence Index = B/A = <u>3.75</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Poa pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Setaria pumila</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Rubia peregrina</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Vicia cracca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

**Hydrophytic Vegetation Indicators:**

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

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

\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

**Definitions of Vegetation Strata:**

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

**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

## SOIL

Sampling Point: UPL CV-3

[illegible]





**Upland CV-3 View facing northeast**



**Upland CV-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CW-1  
 Investigator(s): J.Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-54.19N Long: 73-25-42.72W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CW-1</u>
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.) Palustrine Emergent Marsh - Cattail marsh. Edinger classification: Shallow Emergent Marsh dominated by cattail.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CW-1

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>95</u></td> <td>x 1 = <u>95</u></td> </tr> <tr> <td>FACW species <u>11</u></td> <td>x 2 = <u>22</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>109</u> (A)</td> <td><u>129</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.18</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>95</u>	x 1 = <u>95</u>	FACW species <u>11</u>	x 2 = <u>22</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>109</u> (A)	<u>129</u> (B)	Prevalence Index = B/A = <u>1.18</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>95</u>	x 1 = <u>95</u>																			
FACW species <u>11</u>	x 2 = <u>22</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>3</u>	x 4 = <u>12</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>109</u> (A)	<u>129</u> (B)																			
Prevalence Index = B/A = <u>1.18</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Ulmus americana</u>	<u>3</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Cornus amomum</u>	<u>3</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Typha angustifolia</u>	<u>90</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lythrum salicaria</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Cornus amomum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. <u>Parthenocissus quinquefolia</u>	<u>1</u>	<u>No</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CW-1

[illegible]



**Wetland CW-1 View facing southwest**



**Wetland CW-1 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CW-1  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 25  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-54.00N Long: 73-25-42.69W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CW-1

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>395</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.95</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>10</u>	x 3 = <u>30</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>100</u> (A)	<u>395</u> (B)	Prevalence Index = B/A = <u>3.95</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>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>85</u>	x 4 = <u>340</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>100</u> (A)	<u>395</u> (B)																			
Prevalence Index = B/A = <u>3.95</u>																				
_____ =Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Poa pratensis</u>	<u>75</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Setaria pumila</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Taraxacum officinale</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CW-1

[illegible]



**Upland CW-1 View facing southwest**



**Upland CW-1 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CX-6  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 3  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-51.25N Long: 73-25-45.57W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CX-6</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CX-6

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>40</u></td> <td>x 2 = <u>80</u></td> </tr> <tr> <td>FAC species <u>7</u></td> <td>x 3 = <u>21</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>102</u> (A)</td> <td><u>194</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.90</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>7</u>	x 3 = <u>21</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>102</u> (A)	<u>194</u> (B)	Prevalence Index = B/A = <u>1.90</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>45</u>	x 1 = <u>45</u>																			
FACW species <u>40</u>	x 2 = <u>80</u>																			
FAC species <u>7</u>	x 3 = <u>21</u>																			
FACU species <u>2</u>	x 4 = <u>8</u>																			
UPL species <u>8</u>	x 5 = <u>40</u>																			
Column Totals: <u>102</u> (A)	<u>194</u> (B)																			
Prevalence Index = B/A = <u>1.90</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lythrum salicaria</u>	<u>35</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Agrostis gigantea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Phragmites australis</u>	<u>15</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Typha angustifolia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Scirpus atrovirens</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
6. <u>Symphyotrichum novae-angliae</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. <u>Rubia perigrina</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
9. <u>Artemisia vulgaris</u>	<u>2</u>	<u>No</u>	<u>UPL</u>																	
10. <u>Symphyotrichum ericoides</u>	<u>1</u>	<u>No</u>	<u>FACU</u>																	
11. <u>Vicia cracca</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
12. <u>Cichorium intybus</u>	<u>1</u>	<u>No</u>	<u>FACU</u>																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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



## SOIL

Sampling Point: WET CX-6

[illegible]



**Wetland CX-6 View facing north**



**Wetland CX-6 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CX-6  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 50  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-51.23N Long: 73-25-45.19W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional Old Field.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CX-6

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>2</u></td> <td>x 3 = <u>6</u></td> </tr> <tr> <td>FACU species <u>62</u></td> <td>x 4 = <u>248</u></td> </tr> <tr> <td>UPL species <u>35</u></td> <td>x 5 = <u>175</u></td> </tr> <tr> <td>Column Totals: <u>104</u> (A)</td> <td><u>439</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.22</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>2</u>	x 3 = <u>6</u>	FACU species <u>62</u>	x 4 = <u>248</u>	UPL species <u>35</u>	x 5 = <u>175</u>	Column Totals: <u>104</u> (A)	<u>439</u> (B)	Prevalence Index = B/A = <u>4.22</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>																			
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FACU species <u>62</u>	x 4 = <u>248</u>																			
UPL species <u>35</u>	x 5 = <u>175</u>																			
Column Totals: <u>104</u> (A)	<u>439</u> (B)																			
Prevalence Index = B/A = <u>4.22</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Juniperus virginiana</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
2. <u>Cornus racemosa</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lolium pratense</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Lotus corniculatus</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Rubia peregriana</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Pastinaca sativa</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Solidago canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Artemisia vulgaris</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Symphyotrichum novae-angliae</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
8. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
9. <u>Asclepias syriaca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

**Hydrophytic Vegetation Indicators:**

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

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

\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

**Definitions of Vegetation Strata:**

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

**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

## SOIL

Sampling Point: UPL CX-6

[illegible]





**Upland CX-6 View facing north/northeast**



**Upland CX-6 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CY-4  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 5  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-43.56N Long: 73-25-51.08W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CY-4</u>
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.) Palustrine Emergent Marsh - Cattail Marsh. Edinger classification: Shallow Emergent Marsh. This community is within a linear depression. This community continues between Wetland flags CY-1 to CY-8.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</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) <u>X</u> Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) <u>X</u> 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) <u>X</u> Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8) <u>X</u> FAC-Neutral Test (D5)		<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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CY-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>98</u></td> <td>x 1 = <u>98</u></td> </tr> <tr> <td>FACW species <u>12</u></td> <td>x 2 = <u>24</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>117</u> (A)</td> <td><u>145</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.24</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>98</u>	x 1 = <u>98</u>	FACW species <u>12</u>	x 2 = <u>24</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>117</u> (A)	<u>145</u> (B)	Prevalence Index = B/A = <u>1.24</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>98</u>	x 1 = <u>98</u>																			
FACW species <u>12</u>	x 2 = <u>24</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>2</u>	x 4 = <u>8</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>117</u> (A)	<u>145</u> (B)																			
Prevalence Index = B/A = <u>1.24</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. <u>Cornus amomum</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Cornus racemosa</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Lonicera morrowii</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
<u>17</u>																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Typha angustifolia</u>	<u>88</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lythrum salicaria</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Symphyotrichum novae-angliae</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
<u>100</u>																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

## SOIL

Sampling Point: WET CY-4

[illegible]





**Wetland CY-4 View facing southwest**



**Wetland CY-4 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CY-4  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 10  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-43.38N Long: 73-25-51.03W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CY-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>415</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.15</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>85</u>	x 4 = <u>340</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>100</u> (A)	<u>415</u> (B)	Prevalence Index = B/A = <u>4.15</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>85</u>	x 4 = <u>340</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>100</u> (A)	<u>415</u> (B)																			
Prevalence Index = B/A = <u>4.15</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lolium pratense</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Poa pratensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Artemisia vulgaris</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Lotus corniculatus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Centaurea stoebe</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>100</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

**Hydrophytic Vegetation Indicators:**

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

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

\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

**Definitions of Vegetation Strata:**

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

**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

## SOIL

Sampling Point: UPL CY-4

[illegible]



**Upland CY-4 View facing southwest**



**Upland CY-4 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CY-10  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 10  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-39.71N Long: 73-25-54.05W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CY-10</u>
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.) Palustrine Emergent Marsh - purple loosestrife marsh. Edinger classification: Shallow Emergent Marsh / Purple Loosestrife Marsh. From wetland flags CY-9 to CY-11 consists of this community.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" 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 checked="" type="checkbox"/> Other (Explain in Remarks)	<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 checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>3</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Ground water seep at flag CY-12 feeds intermittent Stream channel portion of wetland CY (from flags 12 to 9).			



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

 Sampling Point: WET CY-10

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Lythrum salicaria</u>	<u>60</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Typha angustifolia</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Carex lurida</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
		<u>100</u> =Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
		=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>100</u>	x 1 = <u>100</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>100</u> (B)
Prevalence Index = B/A = <u>1.00</u>	

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CY-10

[illegible]



**Wetland CY-10 View facing southwest**



**Wetland CY-10 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CY-10  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 25  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-39.68N Long: 73-25-53.9"W Datum: WGS 84  
 Soil Map Unit Name: VeC - Vergennes silty clay loam, 6 to 12 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> 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 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 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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CY-10

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</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>375</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.75</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>375</u> (B)	Prevalence Index = B/A = <u>3.75</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>85</u>	x 4 = <u>340</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>375</u> (B)																			
Prevalence Index = B/A = <u>3.75</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lolium pratense</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Poa pratensis</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Lotus corniculatus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Setaria pumila</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Cichorium intybus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Symphyotrichum ericoides</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Lythrum salicaria</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>100</u> =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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



## SOIL

Sampling Point: UPL CY-10

[illegible]



**Upland CY-10 View facing southwest**



**Upland CY-10 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CZ-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-36.85N Long: 73-25-56.30W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CZ-3</u>
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.) Palustrine Emergent Marsh - purple loosestrife marsh. Edinger classification: Shallow Emergent Marsh / Purple Loosestrife Marsh. This area is periodically mowed.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</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) <u>X</u> 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>3</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CZ-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>70</u></td> <td>x 1 = <u>70</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</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>140</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.40</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>70</u>	x 1 = <u>70</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>10</u>	x 3 = <u>30</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>140</u> (B)	Prevalence Index = B/A = <u>1.40</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>70</u>	x 1 = <u>70</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>10</u>	x 3 = <u>30</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>140</u> (B)																			
Prevalence Index = B/A = <u>1.40</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup>  <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lythrum salicaria</u>	<u>60</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Carex lurida</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Juncus tenuis</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Agrostis gigantea</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Cornus amomum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Eupatorium perfoliatum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CZ-3

[illegible]





**Wetland CZ-3 View facing southwest**



**Wetland CZ-3 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CZ-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 40  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-36.8"N Long: 73-25-56.21W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CZ-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>390</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.90</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>25</u>	x 3 = <u>75</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>100</u> (A)	<u>390</u> (B)	Prevalence Index = B/A = <u>3.90</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>																			
FAC species <u>25</u>	x 3 = <u>75</u>																			
FACU species <u>60</u>	x 4 = <u>240</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>100</u> (A)	<u>390</u> (B)																			
Prevalence Index = B/A = <u>3.90</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Poa pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Setaria pumila</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Lotus corniculatus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Rubia peregriana</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Cichorium intybus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CZ-3

[illegible]





**Upland CZ-3 View facing southwest**



**Upland CZ-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CAA-1  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-33.74N Long: 73-25-59.36W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes NWI classification: PEM2  
 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CAA-1</u>
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.) Palustrine Emergent Marsh - within hay field. Edinger classification: Shallow Emergent Marsh. This area is periodically mowed.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CAA-1

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Phalaris arundinacea</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Lythrum salicaria</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	
3. <u>Carex lurida</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	
4. <u>Eutrochium maculatum</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	
5. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
6. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	_____	=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 1 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>30</u>	x 1 = <u>30</u>
FACW species <u>60</u>	x 2 = <u>120</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>100</u> (A)	<u>200</u> (B)
Prevalence Index = B/A = <u>2.00</u>	

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
         Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CAA-1

[illegible]



**Wetland CAA-1 View facing west**



**Wetland CAA-1 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CBB-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-32.72N Long: 73-25-59.82W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CBB-3</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>8</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CBB-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Lythrum salicaria</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Typha angustifolia</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Onoclea sensibilis</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
4. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
5. <u>Carex lurida</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
6. <u>Cornus sericea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
7. <u>Solidago rugosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
8. <u>Symphyotrichum puniceum</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
		<u>95</u> =Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
		=Total Cover		

**Dominance Test worksheet:**

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>70</u>	x 1 = <u>70</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>5</u>	x 3 = <u>15</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>95</u> (A)	<u>125</u> (B)
Prevalence Index = B/A = <u>1.32</u>	

**Hydrophytic Vegetation Indicators:**

   1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

**Definitions of Vegetation Strata:**

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

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

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

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

**Hydrophytic Vegetation Present?** Yes X No

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

## SOIL

Sampling Point: WET CBB-3

[illegible]



**Wetland CBB-3 View facing southwest**



**Wetland CBB-3 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-33.08N Long: 73-25-59.86W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Cropland/Field Crop. This is a shared upland point that is directly between both wetland CAA (flag CAA-1) and CBB (flag CBB-3).	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>430</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.30</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>70</u>	x 4 = <u>280</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>100</u> (A)	<u>430</u> (B)	Prevalence Index = B/A = <u>4.30</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>70</u>	x 4 = <u>280</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>100</u> (A)	<u>430</u> (B)																			
Prevalence Index = B/A = <u>4.30</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Phleum pratense</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Trifolium pratense</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Lotus corniculatus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Rubia peregrina</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
5. <u>Vicia cracca</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
6. <u>Pastinaca sativa</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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



## SOIL

Sampling Point: UPL

[illegible]



**Upland CAA-1 and CBB-3 View facing northwest**



**Upland CAA-1 and CBB-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CCC-W6A  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-27.96N Long: 73-26-3.38W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CCC-W6A</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</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) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8) _____ FAC-Neutral Test (D5)		<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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>11</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CCC-W6A

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. <u>Cornus sericea</u>	15	Yes	FACW	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		15 =Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Lythrum salicaria</u>	40	Yes	OBL	
2. <u>Typha angustifolia</u>	40	Yes	OBL	
3. <u>Solidago rugosa</u>	15	No	FAC	
4. <u>Eupatorium perfoliatum</u>	5	No	FACW	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
		100 =Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. <u>Vitis aestivalis</u>	2	No	FACU	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
		2 =Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>80</u>	x 1 = <u>80</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>2</u>	x 4 = <u>8</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>117</u> (A)	<u>173</u> (B)
Prevalence Index = B/A = <u>1.48</u>	

**Hydrophytic Vegetation Indicators:**  
   1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
   4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CCC-W6A

[illegible]





**Wetland CCC-W-6A View facing northwest**



**Wetland CCC-W-6A Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: Upl CCC-W6A  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 45  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-27.86N Long: 73-26-3.05W Datum: WGS 84  
 Soil Map Unit Name: VeB - Vergennes silty clay loam, 3 to 8 percent slopes 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland CCC-W6A data plot.</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.) Mowed roadside. Upland CCC-W6A data plot.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CCC-W6A

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>405</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.05</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>10</u>	x 3 = <u>30</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>100</u> (A)	<u>405</u> (B)	Prevalence Index = B/A = <u>4.05</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>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>75</u>	x 4 = <u>300</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>100</u> (A)	<u>405</u> (B)																			
Prevalence Index = B/A = <u>4.05</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lolium pratense</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
2. <u>Phleum pratense</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Setaria pumila</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Rubia peregrina</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Vicia cracca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
6. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>																
12. _____	_____	_____	_____																	
100 =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

## SOIL

Sampling Point Upl CCC-W6A

[illegible]





**Upland CCC-W-6A View facing southwest**



**Upland CCC-W-6A Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CDD-2  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear swale Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-26.09N Long: 73-26-4.23W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CDD-2</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh. This community occurs from flag CDD-1 to CDD-3.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<u>X</u> Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	_____ Marl Deposits (B15)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Dry-Season Water Table (C2)	
_____ Sediment Deposits (B2)	<u>X</u> Oxidized Rhizospheres on Living Roots (C3)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Stunted or Stressed Plants (D1)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)	
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Sparsely Vegetated Concave Surface (B8)		_____ Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>0.5</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>3</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CDD-2

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>75</u></td> <td>x 1 = <u>75</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</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>105</u> (A)</td> <td><u>140</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.33</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>75</u>	x 1 = <u>75</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>140</u> (B)	Prevalence Index = B/A = <u>1.33</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>75</u>	x 1 = <u>75</u>																			
FACW species <u>25</u>	x 2 = <u>50</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>105</u> (A)	<u>140</u> (B)																			
Prevalence Index = B/A = <u>1.33</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus sericea</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lythrum salicaria</u>	<u>65</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Carex lurida</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Cornus sericea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Eupatorium perfoliatum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Symphyotrichum novae-angliae</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Agrostis gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: WET CDD-2

[illegible]



**Wetland CDD-2 View facing southwest**



**Wetland CDD-2 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CDD-5  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-24.20N Long: 73-26-5.13W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CDD-5</u>
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.) Palustrine Scrub Shrub. Edinger classification: Shrub Swamp. This community occurs from flag CDD-4 to CDD-6.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<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>_____</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>X</u> Shallow Aquitard (D3)	
<u>_____</u> Sparsely Vegetated Concave Surface (B8)		<u>_____</u> Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CDD-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>				
1. <u>Cornus sericea</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Salix nigra</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	
3. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	<u>65</u>	=Total Cover		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Lythrum salicaria</u>	<u>45</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Typha angustifolia</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Carex lurida</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
4. <u>Cornus sericea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
5. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
6. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
7. <u>Symphyotrichum novae-angliae</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>95</u>	=Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	_____	=Total Cover		

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
 Total Number of Dominant Species Across All Strata: 3 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species <u>85</u>	x 1 = <u>85</u>
FACW species <u>60</u>	x 2 = <u>120</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>160</u> (A)	<u>250</u> (B)
Prevalence Index = B/A = <u>1.56</u>	

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☒ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
         Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CDD-5

[illegible]



**Wetland CDD-5 View facing southwest**



**Wetland CDD-5 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CDD-7  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear swale Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-22.90N Long: 73-26-5.67W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony NWI classification: PEM2  
 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CDD-7</u>
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.) Palustrine Emergent Marsh. Edinger classification: Shallow Emergent Marsh. This community is mowed and maintained as lawn. This community occurs between flags CDD-6 and CDD-8.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <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) _____ 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CDD-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</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>215</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.15</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>70</u>	x 2 = <u>140</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>215</u> (B)	Prevalence Index = B/A = <u>2.15</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>15</u>	x 1 = <u>15</u>																			
FACW species <u>70</u>	x 2 = <u>140</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>215</u> (B)																			
Prevalence Index = B/A = <u>2.15</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  </u> X 2 - Dominance Test is >50% <u>  </u> X 3 - Prevalence Index is ≤3.0 <sup>1</sup>  <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lysimachia nummularia</u>	<u>70</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Lythrum salicaria</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Poa pratensis</u>	<u>15</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				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Hydrophytic Vegetation Present?</b> Yes <u>  X  </u> No <u>      </u>																				

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



## SOIL

Sampling Point: WET CDD-7

[illegible]



**Wetland CDD-7 View facing north/northeast**



**Wetland CDD-7 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 45  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-26.03N Long: 73-26-4.06W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside. This upland data point is for wetland data points CDD-2, CDD-5 and CDD-7.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>385</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.85</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>20</u>	x 3 = <u>60</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>100</u> (A)	<u>385</u> (B)	Prevalence Index = B/A = <u>3.85</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>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>75</u>	x 4 = <u>300</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>100</u> (A)	<u>385</u> (B)																			
Prevalence Index = B/A = <u>3.85</u>																				
=Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Poa pratensis</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Setaria pumila</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Lotus corniculatus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Vicia cracca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Cichorium intybus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
100 =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

## SOIL

Sampling Point: UPL

[illegible]





**Upland CDD-2, CDD-5 and CDD-7 View facing southwest**



**Upland CDD-2, CDD-5 and CDD-7 Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CEE-5  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-20.93N Long: 73-26-6.50W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CEE-5</u>
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.) Palustrine Emergent Marsh. Efinger classification: Shallow Emergent Marsh dominated by purple loosestrife.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> 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 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 checked="" 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CEE-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>82</u></td> <td>x 2 = <u>164</u></td> </tr> <tr> <td>FAC species <u>6</u></td> <td>x 3 = <u>18</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>210</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.91</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>82</u>	x 2 = <u>164</u>	FAC species <u>6</u>	x 3 = <u>18</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>210</u> (B)	Prevalence Index = B/A = <u>1.91</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>20</u>	x 1 = <u>20</u>																			
FACW species <u>82</u>	x 2 = <u>164</u>																			
FAC species <u>6</u>	x 3 = <u>18</u>																			
FACU species <u>2</u>	x 4 = <u>8</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>110</u> (A)	<u>210</u> (B)																			
Prevalence Index = B/A = <u>1.91</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>6</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Ulmus americana</u>	<u>2</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8 =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lysimachia nummularia</u>	<u>80</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Carex vulpinoidea</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Carex lurida</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
100 =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u>Vitis aestivalis</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
2 =Total Cover																				

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
       Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No

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

## SOIL

Sampling Point: WET CEE-5

[illegible]





**Wetland CEE-5 View facing north/northeast**



**Wetland CEE-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CEE-5  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 35  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-20.77N Long: 73-26-6.45W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed lawn.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CEE-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>95</u></td> <td>x 4 = <u>380</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>405</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.05</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>95</u>	x 4 = <u>380</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>100</u> (A)	<u>405</u> (B)	Prevalence Index = B/A = <u>4.05</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>95</u>	x 4 = <u>380</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>100</u> (A)	<u>405</u> (B)																			
Prevalence Index = B/A = <u>4.05</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Poa pratensis</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Plantago lanceolata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Lotus corniculatus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Cichorium intybus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ 100 =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CEE-5

[illegible]



**Upland CEE-5 View facing north**



**Upland CEE-5 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CFF-4A  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Linear depression Local relief (concave, convex, none): Concave Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-20.93N Long: 73-26-6.50W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CFF-4A</u>
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.) Palustrine Emergent Marsh - Linear wetland ditch. Edinger classification: Shallow Emergent Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input 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 checked="" 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CFF-4A

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>27</u></td> <td>x 2 = <u>54</u></td> </tr> <tr> <td>FAC species <u>21</u></td> <td>x 3 = <u>63</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>93</u> (A)</td> <td><u>162</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.74</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>27</u>	x 2 = <u>54</u>	FAC species <u>21</u>	x 3 = <u>63</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>93</u> (A)	<u>162</u> (B)	Prevalence Index = B/A = <u>1.74</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>45</u>	x 1 = <u>45</u>																			
FACW species <u>27</u>	x 2 = <u>54</u>																			
FAC species <u>21</u>	x 3 = <u>63</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>93</u> (A)	<u>162</u> (B)																			
Prevalence Index = B/A = <u>1.74</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>6</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Ulmus americana</u>	<u>2</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Lythrum salicaria</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>																	
2. <u>Phalaris arundinacea</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Typha angustifolia</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>																	
4. <u>Juncus tenuis</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Euthamia graminifolia</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

**Hydrophytic Vegetation Indicators:**  
1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
       Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No \_\_\_\_\_

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

## SOIL

Sampling Point: WET CFF-4A

[illegible]



**Wetland CFF-4A View facing south**



**Wetland CFF-4A Soils**

**Phase 1**

## **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CFF-4A  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 45  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-20.07N Long: 73-26-6.49W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CFF-4A

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>325</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.25</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>100</u> (A)	<u>325</u> (B)	Prevalence Index = B/A = <u>3.25</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>30</u>	x 2 = <u>60</u>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>45</u>	x 4 = <u>180</u>																			
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Column Totals: <u>100</u> (A)	<u>325</u> (B)																			
Prevalence Index = B/A = <u>3.25</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Phalaris arundinacea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Setaria pumila</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Cichorium intybus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Lotus corniculatus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u>Taraxacum officinale</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
6. <u>Trifolium pratense</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
7. <u>Vicia cracca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
8. <u>Plantago lanceolata</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>100</u> =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

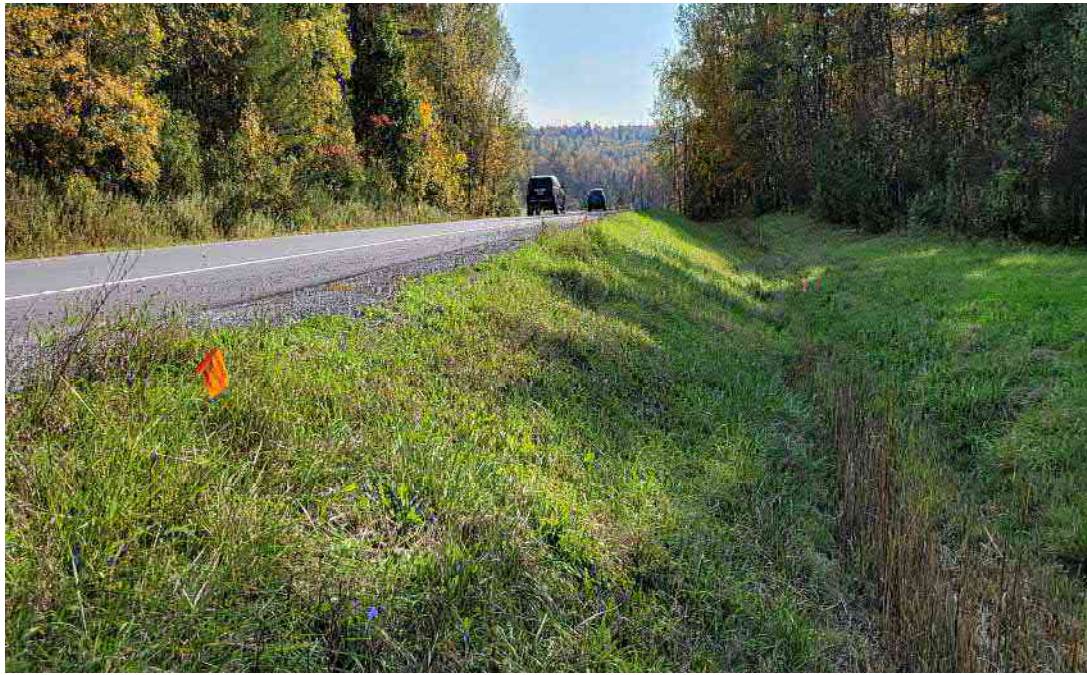
Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: UPL CFF-4A

[illegible]



**Upland CFF-4A View facing south**



**Upland CFF-4A Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: WET CGG-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-15.60N Long: 73-26-7.73W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Near Flag CGG-3</u>
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.) PalustrineScrub Shrub. Edinger classification: Shrub Swamp.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input 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 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 checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>10</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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 CGG-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Ulmus americana</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</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>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>30</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <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>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</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>160</u> (A)</td> <td><u>330</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.06</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>160</u> (A)	<u>330</u> (B)	Prevalence Index = B/A = <u>2.06</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>30</u>	x 1 = <u>30</u>																			
FACW species <u>100</u>	x 2 = <u>200</u>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>160</u> (A)	<u>330</u> (B)																			
Prevalence Index = B/A = <u>2.06</u>																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15'</u> )																				
1. <u>Cornus amomum</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Lonicera morrowii</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Rhamnus cathartica</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>65</u>	<u>=Total Cover</u>																		
<b>Herb Stratum</b> (Plot size: <u>5'</u> )																				
1. <u>Lythrum salicaria</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Solidago gigantea</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Solidago rugosa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Typha angustifolia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Cornus amomum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>65</u>	<u>=Total Cover</u>																		
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

## SOIL

Sampling Point: WET CGG-3

[illegible]





**Wetland CGG-3 View facing west**



**Wetland CGG-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam / Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: UPL CGG-3  
 Investigator(s): J. Greaves, C. Scrivner Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 40  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-15.53N Long: 73-26-7.37W Datum: WGS 84  
 Soil Map Unit Name: CHC - Charlton fine sandy loam, 3 to 8 percent slopes, very stony 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>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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 CGG-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Prevalence Index worksheet:</b>  <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>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>415</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.15</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>85</u>	x 4 = <u>340</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>100</u> (A)	<u>415</u> (B)	Prevalence Index = B/A = <u>4.15</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>85</u>	x 4 = <u>340</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>100</u> (A)	<u>415</u> (B)																			
Prevalence Index = B/A = <u>4.15</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				<b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lolium pratense</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Lotus corniculatus</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Rubia peregriana</u>	<u>15</u>	<u>No</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

## SOIL

Sampling Point: UPL CGG-3

[illegible]





**Upland CGG-3 View facing southeast**



**Upland CGG-3 Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: CHH-2 Wet  
 Investigator(s): N. Frazer, S. Berryman Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-13.32N Long: 73-26-07.82W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Kingsbury silty clay 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 _____	<b>Is the Sampled Area within a Wetland?</b> 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.)	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <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) _____ 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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: CHH-2 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Pinus strobus</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>60.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <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>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>88</u></td> <td>x 3 = <u>264</u></td> </tr> <tr> <td>FACU species <u>42</u></td> <td>x 4 = <u>168</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>145</u> (A)</td> <td><u>477</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.29</u></td> </tr> </table>	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>88</u>	x 3 = <u>264</u>	FACU species <u>42</u>	x 4 = <u>168</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>145</u> (A)	<u>477</u> (B)	Prevalence Index = B/A = <u>3.29</u>	
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>88</u>	x 3 = <u>264</u>																			
FACU species <u>42</u>	x 4 = <u>168</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>145</u> (A)	<u>477</u> (B)																			
Prevalence Index = B/A = <u>3.29</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15'</u> )																				
1. <u><i>Pinus strobus</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Juniperus virginiana</i></u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
3. <u><i>Cornus racemosa</i></u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u><i>Lonicera tatarica</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u><i>Viburnum lentago</i></u>	<u>8</u>	<u>No</u>	<u>FAC</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>90</u>	<u>=Total Cover</u>																		
<b>Herb Stratum</b> (Plot size: <u>5'</u> )																				
1. <u><i>Solidago canadensis</i></u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. <u><i>Securigera varia</i></u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
3. <u><i>Cornus racemosa</i></u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u><i>Solidago gigantea</i></u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
5. <u><i>Juniperus virginiana</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>50</u>	<u>=Total Cover</u>																		
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

## SOIL

Sampling Point CHH-2 Wet

[illegible]





**Wetland CHH-2- View facing north**



**Wetland CHH-2- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: CHH-4 Wet  
 Investigator(s): N. Frazer, S. Berryman Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-13.32N Long: 73-26-07.82W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Kingsbury silty clay 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 _____	<b>Is the Sampled Area within a Wetland?</b> 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.) Cattail marsh.		

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" 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> <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 checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>0.5</u> 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)		<b>Wetland Hydrology Present?</b> 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: CHH-4 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>85</u></td> <td>x 1 = <u>85</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>2</u></td> <td>x 3 = <u>6</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>92</u> (A)</td> <td><u>101</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.10</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>85</u>	x 1 = <u>85</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>2</u>	x 3 = <u>6</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>92</u> (A)	<u>101</u> (B)	Prevalence Index = B/A = <u>1.10</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>85</u>	x 1 = <u>85</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>2</u>	x 3 = <u>6</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>92</u> (A)	<u>101</u> (B)																			
Prevalence Index = B/A = <u>1.10</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus amomum</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Typha angustifolia</u>	<u>70</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. <u>Lythrum salicaria</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Euthamia graminifolia</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Eleocharis palustris</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

## SOIL

Sampling Point CHH-4 Wet

[illegible]



**Wetland CHH-4- View facing west**



**Wetland CHH-4- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: CHH-2 & 4 Upl  
 Investigator(s): N. Frazer, S. Berryman Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-13.32N Long: 73-26-07.82W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Kingsbury silty clay NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional old field and scrub shrub upland.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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: CHH-2 & 4 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>50.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>90</u></td> <td>x 3 = <u>270</u></td> </tr> <tr> <td>FACU species <u>100</u></td> <td>x 4 = <u>400</u></td> </tr> <tr> <td>UPL species <u>1</u></td> <td>x 5 = <u>5</u></td> </tr> <tr> <td>Column Totals: <u>191</u> (A)</td> <td><u>675</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.53</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>90</u>	x 3 = <u>270</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>191</u> (A)	<u>675</u> (B)	Prevalence Index = B/A = <u>3.53</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>																			
FAC species <u>90</u>	x 3 = <u>270</u>																			
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UPL species <u>1</u>	x 5 = <u>5</u>																			
Column Totals: <u>191</u> (A)	<u>675</u> (B)																			
Prevalence Index = B/A = <u>3.53</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. <u>Cornus racemosa</u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lonicera tatarica</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lotus corniculatus</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>																
2. <u>Equisetum arvense</u>	<u>20</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Daucus carota</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Solidago canadensis</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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



## SOIL

Sampling Point CHH-2 &amp; 4 Upl

[illegible]



**Upland CHH-2 and CHH-4- View facing south**



**Upland CHH-2 and CHH-4- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: CHH-16 Wet  
 Investigator(s): N. Frazer, S. Berryman Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-08.04N Long: 73-26-06.94W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Kingsbury silty clay 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 _____	<b>Is the Sampled Area within a Wetland?</b> 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.)			

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) _____ Aquatic Fauna (B13) <input checked="" type="checkbox"/> 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) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>8</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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: CHH-16 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>90</u></td> <td>x 1 = <u>90</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>2</u></td> <td>x 3 = <u>6</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>6</u></td> <td>x 5 = <u>30</u></td> </tr> <tr> <td>Column Totals: <u>98</u> (A)</td> <td><u>126</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.29</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>90</u>	x 1 = <u>90</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>2</u>	x 3 = <u>6</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>6</u>	x 5 = <u>30</u>	Column Totals: <u>98</u> (A)	<u>126</u> (B)	Prevalence Index = B/A = <u>1.29</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>90</u>	x 1 = <u>90</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>2</u>	x 3 = <u>6</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>6</u>	x 5 = <u>30</u>																			
Column Totals: <u>98</u> (A)	<u>126</u> (B)																			
Prevalence Index = B/A = <u>1.29</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lythrum salicaria</u>	<u>35</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>    </u>																
2. <u>Typha angustifolia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Euthamia graminifolia</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Securigera varia</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Scirpus atrovirens</u>	<u>50</u>	<u>Yes</u>	<u>OBL</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		98 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

## SOIL

Sampling Point CHH-16 Wet

[illegible]





**Wetland CHH-16- View facing west**



**Wetland CHH-16- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/13/21  
 Applicant/Owner: TDI State: NY Sampling Point: CHH-16 Upl  
 Investigator(s): N. Frazer, S. Berryman Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-08.04N Long: 73-26-06.94W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Kingsbury silty clay NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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: CHH-16 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>8</u></td> <td>x 5 = <u>40</u></td> </tr> <tr> <td>Column Totals: <u>108</u> (A)</td> <td><u>440</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.07</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>100</u>	x 4 = <u>400</u>	UPL species <u>8</u>	x 5 = <u>40</u>	Column Totals: <u>108</u> (A)	<u>440</u> (B)	Prevalence Index = B/A = <u>4.07</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>100</u>	x 4 = <u>400</u>																			
UPL species <u>8</u>	x 5 = <u>40</u>																			
Column Totals: <u>108</u> (A)	<u>440</u> (B)																			
Prevalence Index = B/A = <u>4.07</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Poa pratensis</u>	<u>100</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Pastinaca sativa</u>	<u>7</u>	<u>No</u>	<u>UPL</u>																	
3. <u>Securigera varia</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		108 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

## SOIL

Sampling Point CHH-16 Upl

[illegible]





**Upland CHH-16- View facing south**



**Upland CHH-16- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/ Washington Sampling Date: 10/12/21  
Applicant/Owner: TDI State: NY Sampling Point: C2A-8 Wet  
Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0  
Subregion (LRR or MLRA): LRR R Lat: 43-42-00.28N Long: 73-26-04.07W Datum: \_\_\_\_\_  
Soil Map Unit Name: Covington silty clay loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> 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.) Cattail Marsh	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u>  </u> Surface Water (A1) <u>  </u> Water-Stained Leaves (B9) <u>X</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>X</u> Geomorphic Position (D2) <u>  </u> Shallow Aquitard (D3) <u>  </u> Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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: C2A-8 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Cornus racemosa</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>55</u></td> <td>x 1 = <u>55</u></td> </tr> <tr> <td>FACW species <u>12</u></td> <td>x 2 = <u>24</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</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>122</u> (A)</td> <td><u>249</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.04</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>55</u>	x 1 = <u>55</u>	FACW species <u>12</u>	x 2 = <u>24</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>122</u> (A)	<u>249</u> (B)	Prevalence Index = B/A = <u>2.04</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>55</u>	x 1 = <u>55</u>																			
FACW species <u>12</u>	x 2 = <u>24</u>																			
FAC species <u>50</u>	x 3 = <u>150</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>122</u> (A)	<u>249</u> (B)																			
Prevalence Index = B/A = <u>2.04</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. <u>Cornus racemosa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lonicera tatarica</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>20</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Typha angustifolia</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. <u>Equisetum hyemale</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Solidago gigantea</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Lycopus americanus</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
5. <u>Onoclea sensibilis</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Sphagnum moss species</u>	<u>15</u>	<u>No</u>	_____																	
7. <u>Lythrum salicaria</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>112</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

## SOIL

Sampling Point C2A-8 Wet

[illegible]



**Wetland C2A-8- View facing west**



**Wetland C2A-8- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2A-12 Wet  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-00.28N Long: 73-26-04.07W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Covington silty clay loam 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 _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Scrub shrub at this data point location. Wetland turns to ditch in the vicinity of flag C2A-18 (heading south).	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <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) _____ 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)
<b>Field Observations:</b> 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>2</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Culvert present under driveway between flags C2A-18 and C2A-19.	

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

 Sampling Point: C2A-12 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Pinus strobus</i></u>	<u>1</u>	<u>No</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>60.0%</u> (A/B)																
2. <u><i>Rhamnus cathartica</i></u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>6</u>	=Total Cover																	
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u><i>Cornus racemosa</i></u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b>  <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>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>53</u></td> <td>x 4 = <u>212</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>168</u> (A)</td> <td><u>537</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.20</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>53</u>	x 4 = <u>212</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>168</u> (A)	<u>537</u> (B)	Prevalence Index = B/A = <u>3.20</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>95</u>	x 3 = <u>285</u>																			
FACU species <u>53</u>	x 4 = <u>212</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>168</u> (A)	<u>537</u> (B)																			
Prevalence Index = B/A = <u>3.20</u>																				
2. <u><i>Lonicera tatarica</i></u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
3. <u><i>Pinus strobus</i></u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
4. <u><i>Cornus amomum</i></u>	<u>15</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>77</u>	=Total Cover																	
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u><i>Equisetum hyemale</i></u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Cornus racemosa</i></u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
3. <u><i>Sphagnum moss species</i></u>	<u>10</u>	<u>No</u>	_____																	
4. <u><i>Solidago canadensis</i></u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u><i>Cornus amomum</i></u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>90</u>	=Total Cover																	
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u><i>Vitis aestivalis</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>5</u>	=Total Cover																	

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

## SOIL

Sampling Point C2A-12 Wet

[illegible]



**Wetland C2A-12- View facing south**



**Wetland C2A-12- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2A-8 Upl  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope %: 2  
 Subregion (LRR or MLRA): LRR R Lat: 43-42-00.28N Long: 73-26-04.07W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Covington silt clay loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Mowed roadside/ successional old field data points for upland C2A-8 and C2A-12.		

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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: C2A-8 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</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>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>55</u></td> <td>x 4 = <u>220</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>420</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.65</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>50</u>	x 3 = <u>150</u>	FACU species <u>55</u>	x 4 = <u>220</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>115</u> (A)	<u>420</u> (B)	Prevalence Index = B/A = <u>3.65</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>																			
FAC species <u>50</u>	x 3 = <u>150</u>																			
FACU species <u>55</u>	x 4 = <u>220</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>115</u> (A)	<u>420</u> (B)																			
Prevalence Index = B/A = <u>3.65</u>																				
=Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Solidago canadensis</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Equisetum hyemale</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
4. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Galium boreale</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Poa pratensis</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
7. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

**Hydrophytic Vegetation Indicators:**

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

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

\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

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

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

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

**Definitions of Vegetation Strata:**

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

**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

## SOIL

Sampling Point C2A-8 Upd

[illegible]



**Upland C2A-8 and C2A-12- View facing north**



**Upland C2A-8 and C2A-12- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2B-3 Wet  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-52.80N Long: 73-25-57.77W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association 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 _____	<b>Is the Sampled Area within a Wetland?</b> 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.) Cattail marsh.			

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</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) _____ 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>9</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Culvert under Route 22 at flag C2B-7.		

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

 Sampling Point: C2B-3 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>108</u></td> <td>x 1 = <u>108</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>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>118</u> (A)</td> <td><u>128</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.08</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>108</u>	x 1 = <u>108</u>	FACW species <u>10</u>	x 2 = <u>20</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>118</u> (A)	<u>128</u> (B)	Prevalence Index = B/A = <u>1.08</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>108</u>	x 1 = <u>108</u>																			
FACW species <u>10</u>	x 2 = <u>20</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>118</u> (A)	<u>128</u> (B)																			
Prevalence Index = B/A = <u>1.08</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. <u>Cornus amomum</u>	<u>8</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Typha angustifolia</u>	<u>98</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. <u>Lythrum salicaria</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Cornus amomum</u>	<u>2</u>	<u>No</u>	<u>FACW</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																		

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

## SOIL

Sampling Point C2B-3 Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 2/1	100					Muck	
3-16	10YR 2/1	100					Loamy/Clayey	
16-22	N 4/	100					Loamy/Clayey	

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b>			<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR R,</b>	<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR K, L, MLRA 149B)</b>			
<input type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> <b>MLRA 149B)</b>	<input type="checkbox"/> Coast Prairie Redox (A16) ( <b>LRR K, L, R)</b>			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR R, MLRA 149B)</b>	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) ( <b>LRR K, L, R)</b>			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Chroma Sands (S11) ( <b>LRR K, L)</b>	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR K, L)</b>			
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR K, L)</b>	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR K, L)</b>			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12) ( <b>LRR K, L, R)</b>			
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>MLRA 149B)</b>			
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Mesic Spodic (TA6) ( <b>MLRA 144A, 145, 149B)</b>			
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Marl (F10) ( <b>LRR K, L)</b>	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Dark Surface (S7)					

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

<b>Restrictive Layer (if observed):</b>			
Type: none		<b>Hydric Soil Present?</b>	Yes X No
Depth (inches):			

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



**Wetland C2B-3- View facing west**



**Wetland C2B-3- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Putnam/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2B-3 Upl  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-52.80N Long: 73-25-57.77W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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: C2B-3 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <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>87</u></td> <td>x 4 = <u>348</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>117</u> (A)</td> <td><u>498</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.26</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>87</u>	x 4 = <u>348</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>117</u> (A)	<u>498</u> (B)	Prevalence Index = B/A = <u>4.26</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>87</u>	x 4 = <u>348</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>117</u> (A)	<u>498</u> (B)																			
Prevalence Index = B/A = <u>4.26</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Poa pratensis</u>	<u>75</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Pastinaca sativa</u>	<u>15</u>	<u>No</u>	<u>UPL</u>																	
3. <u>Cirsium arvense</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Daucus carota</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Vicia cracca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Solidago canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>117</u> =Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

## SOIL

Sampling Point	C2B-3 Upl
----------------	-----------

[illegible]



**Upland C2B-3- View facing north**



**Upland C2B-3- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Dresden/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2C-7 Wet  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): convex Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-43.38N Long: 73-25-49.99W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association 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 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Pond with cattail fringe. Rip rap present along pond edge.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) _____ Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) _____ Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) _____ Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) _____ Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) _____ Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) _____		<u>Secondary Indicators (minimum of two required)</u> <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 checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>4</u> Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Rip rap along pond edge. Unable to determine saturation or presence of water table.		

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

 Sampling Point: C2C-7 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>100</u></td> <td>x 1 = <u>100</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>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>100</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>100</u>	x 1 = <u>100</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>100</u> (B)	Prevalence Index = B/A = <u>1.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>100</u>	x 1 = <u>100</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>100</u> (B)																			
Prevalence Index = B/A = <u>1.00</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Typha angustifolia</u>	<u>90</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>  </u>																
2. <u>Lemna minor</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Carex species</u>	<u>15</u>	<u>No</u>	<u>  </u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		115 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

## SOIL

Sampling Point C2C-7 Wet

[illegible]



**Wetland C2C-7- View facing west**



**Wetland C2C-7- Rip rap lined pond edge**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Dresden/Washington Sampling Date: 10/12/21  
Applicant/Owner: TDI State: NY Sampling Point: C2C-7 Upl  
Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope %: 1  
Subregion (LRR or MLRA): LRR R Lat: 43-41-43.38N Long: 73-25-49.99W Datum: \_\_\_\_\_  
Soil Map Unit Name: Hollis-Charlton association NWI classification: N/A  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil 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 _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Successional old field with rip rap embankment.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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: C2C-7 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>0.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>107</u></td> <td>x 4 = <u>428</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>112</u> (A)</td> <td><u>453</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.04</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>107</u>	x 4 = <u>428</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>112</u> (A)	<u>453</u> (B)	Prevalence Index = B/A = <u>4.04</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>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>107</u>	x 4 = <u>428</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>112</u> (A)	<u>453</u> (B)																			
Prevalence Index = B/A = <u>4.04</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Juniperus virginiana</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Schedonorus pratensis</u>	<u>85</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>  </u> No <u>X</u>																
2. <u>Securigera varia</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
3. <u>Lotus corniculatus</u>	<u>20</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

## SOIL

Sampling Point	C2C-7 Upl
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[illegible]



**Upland C2C-7- View facing south**



**Upland C2C-7- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Dresden/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2D-4 Wet  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-30.85N Long: 73-25-31.46W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Cattail Marsh.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators</u> (minimum of one is required; check all that apply)		<u>Secondary Indicators</u> (minimum of two required)	
<u>X</u> Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	
<u>X</u> High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	
<u>X</u> Saturation (A3)	_____ Marl Deposits (B15)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Dry-Season Water Table (C2)	
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Stunted or Stressed Plants (D1)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)	
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Sparsely Vegetated Concave Surface (B8)		<u>X</u> Microtopographic Relief (D4)	
		<u>X</u> FAC-Neutral Test (D5)	
<b>Field Observations:</b> Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>0.5</u> Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>8</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> 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: C2D-4 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Tsuga canadensis</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  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>5</u>	<u>=Total Cover</u>		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>12</u></td> <td>x 3 = <u>36</u></td> </tr> <tr> <td>FACU species <u>9</u></td> <td>x 4 = <u>36</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>68</u> (A)</td> <td><u>121</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.78</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>12</u>	x 3 = <u>36</u>	FACU species <u>9</u>	x 4 = <u>36</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>68</u> (A)	<u>121</u> (B)	Prevalence Index = B/A = <u>1.78</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>45</u>	x 1 = <u>45</u>																			
FACW species <u>2</u>	x 2 = <u>4</u>																			
FAC species <u>12</u>	x 3 = <u>36</u>																			
FACU species <u>9</u>	x 4 = <u>36</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>68</u> (A)	<u>121</u> (B)																			
Prevalence Index = B/A = <u>1.78</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u><i>Betula alleghaniensis</i></u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u><i>Typha angustifolia</i></u>	<u>35</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b>  <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>        </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Equisetum arvense</i></u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
3. <u><i>Euthamia graminifolia</i></u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
4. <u><i>Phragmites australis</i></u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
5. <u><i>Lythrum salicaria</i></u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
6. <u><i>Tussilago farfara</i></u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
7. <u><i>Carex sp.</i></u>	<u>2</u>	<u>No</u>	_____																	
8. <u><i>Juncus effusus</i></u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
9. <u><i>Pinus strobus</i></u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>60</u>	<u>=Total Cover</u>																		
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	<u>=Total Cover</u>																			

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

## SOIL

Sampling Point: C2D-4 Wet

[illegible]



**Wetland C2D-4- View facing west**



**Wetland C2D-4- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Dresden/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2D-4 Upl  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-30.85N Long: 73-25-31.46W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
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.) Forested upland.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> 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: C2D-4 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Tsuga canadensis</i></u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>10</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. <u><i>Populus deltoides</i></u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
3. <u><i>Pinus strobus</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u><i>Fagus grandifolia</i></u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>95</u>	=Total Cover	<b>Prevalence Index worksheet:</b>  <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>1</u></td> <td>x 2 = <u>2</u></td> </tr> <tr> <td>FAC species <u>22</u></td> <td>x 3 = <u>66</u></td> </tr> <tr> <td>FACU species <u>197</u></td> <td>x 4 = <u>788</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>225</u> (A)</td> <td><u>881</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.92</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>1</u>	x 2 = <u>2</u>	FAC species <u>22</u>	x 3 = <u>66</u>	FACU species <u>197</u>	x 4 = <u>788</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>225</u> (A)	<u>881</u> (B)	Prevalence Index = B/A = <u>3.92</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>1</u>	x 2 = <u>2</u>																			
FAC species <u>22</u>	x 3 = <u>66</u>																			
FACU species <u>197</u>	x 4 = <u>788</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>225</u> (A)	<u>881</u> (B)																			
Prevalence Index = B/A = <u>3.92</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u><i>Tsuga canadensis</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u><i>Pinus strobus</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u><i>Acer pensylvanicum</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u><i>Fagus grandifolia</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>40</u>	=Total Cover	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>_____</u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u><i>Equisetum arvense</i></u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
2. <u><i>Fagus grandifolia</i></u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u><i>Tsuga canadensis</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u><i>Taraxacum officinale</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u><i>Asclepias syriaca</i></u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. <u><i>Onoclea sensibilis</i></u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
7. <u><i>Trifolium repens</i></u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
8. <u><i>Achillea millefolium</i></u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
9. <u><i>Acer pensylvanicum</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
10. <u><i>Acer saccharum</i></u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
11. <u><i>Geum canadense</i></u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
12. <u><i>Galium boreale</i></u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
		<u>85</u>	=Total Cover																	
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u><i>Vitis aestivalis</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>5</u>	=Total Cover	<b>Hydrophytic Vegetation Present?</b> Yes <u>_____</u> No <u>X</u>																

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

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

 Sampling Point: C2D-4 Upl

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
	<u>95</u>	=Total Cover	
<u>Sapling/Shrub Stratum</u>			
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
	<u>40</u>	=Total Cover	
<u>Herb Stratum</u>			
13. <i>Trifolium pratense</i>	<u>5</u>	No	FACU
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
21. _____	_____	_____	_____
22. _____	_____	_____	_____
23. _____	_____	_____	_____
24. _____	_____	_____	_____
	<u>85</u>	=Total Cover	
<u>Woody Vine Stratum</u>			
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	<u>5</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.

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

## SOIL

Sampling Point	C2D-4 Upl
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[illegible]





**Upland C2D-4- View facing south**



**Upland C2D-4- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Dresden/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2E-3 Wet  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope %: 1  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-30.17N Long: 73-25-28.21W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association 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 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 _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Linear vegetated roadside ditch. Soils are disturbed.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> 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)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Culvert present at flag C2E-7. Unflagged ditch/ conveyance of flow continues south to stream C2S1.		

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

 Sampling Point: C2E-3 Wet

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  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>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <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>85</u></td> <td>x 1 = <u>85</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>3</u></td> <td>x 5 = <u>15</u></td> </tr> <tr> <td>Column Totals: <u>113</u> (A)</td> <td><u>180</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.59</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>85</u>	x 1 = <u>85</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>3</u>	x 5 = <u>15</u>	Column Totals: <u>113</u> (A)	<u>180</u> (B)	Prevalence Index = B/A = <u>1.59</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>85</u>	x 1 = <u>85</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>3</u>	x 5 = <u>15</u>																			
Column Totals: <u>113</u> (A)	<u>180</u> (B)																			
Prevalence Index = B/A = <u>1.59</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> <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 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Lythrum salicaria</u>	<u>85</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. <u>Solidago gigantea</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>Pastinaca sativa</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Vicia cracca</u>	<u>2</u>	<u>No</u>	<u>UPL</u>																	
6. <u>Euthamia graminifolia</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Poa pratensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		113 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

## SOIL

Sampling Point C2E-3 Wet

[illegible]





**Wetland C2E-3- View facing southeast**



**Wetland C2E-3- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Dresden/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2E-3 Upl  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-30.17N Long: 73-25-28.21 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <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)
<b>Field Observations:</b> 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)	<b>Wetland Hydrology Present?</b> 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: C2E-3 Upl

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Ulmus americana</i></u>	<u>5</u>	<u>No</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</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>16.7%</u> (A/B)																
2. <u><i>Tsuga canadensis</i></u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u><i>Carya ovata</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>40</u>	=Total Cover	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>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>13</u></td> <td>x 2 = <u>26</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>115</u></td> <td>x 4 = <u>460</u></td> </tr> <tr> <td>UPL species <u>21</u></td> <td>x 5 = <u>105</u></td> </tr> <tr> <td>Column Totals: <u>159</u> (A)</td> <td><u>621</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.91</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>13</u>	x 2 = <u>26</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>115</u>	x 4 = <u>460</u>	UPL species <u>21</u>	x 5 = <u>105</u>	Column Totals: <u>159</u> (A)	<u>621</u> (B)	Prevalence Index = B/A = <u>3.91</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>13</u>	x 2 = <u>26</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>115</u>	x 4 = <u>460</u>																			
UPL species <u>21</u>	x 5 = <u>105</u>																			
Column Totals: <u>159</u> (A)	<u>621</u> (B)																			
Prevalence Index = B/A = <u>3.91</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u><i>Pinus strobus</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u><i>Ulmus americana</i></u>	<u>8</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>13</u>	=Total Cover	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>_____</u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u><i>Schedonorus pratensis</i></u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u><i>Asclepias syriaca</i></u>	<u>8</u>	<u>No</u>	<u>UPL</u>																	
3. <u><i>Galium boreale</i></u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. <u><i>Daucus carota</i></u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u><i>Solidago canadensis</i></u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
6. <u><i>Tussilago farfara</i></u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
7. <u><i>Securigera varia</i></u>	<u>8</u>	<u>No</u>	<u>UPL</u>																	
8. <u><i>Equisetum arvense</i></u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>101</u>	=Total Cover	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. <u><i>Vitis aestivalis</i></u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>5</u>	=Total Cover																	

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

## SOIL

Sampling Point C2E-3 Upd

[illegible]





**Upland C2E-3- View facing southeast**



**Upland C2E-3- Soils**

**Phase 1**

**SITE PHOTOGRAPHS**

**Champlain Hudson Power Express**

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Dresden/Washington Sampling Date: 10/12/21  
 Applicant/Owner: TDI State: NY Sampling Point: C2F-2 Wet  
 Investigator(s): N. Frazer, C. Einstein Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope %: 0  
 Subregion (LRR or MLRA): LRR R Lat: 43-41-25.33N Long: 73-25-22.84W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Hollis-Charlton association 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 _____	<b>Is the Sampled Area within a Wetland?</b> 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.) Linear vegetated ditch.			

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" 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 checked="" 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> <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 checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>0.25</u> Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>10</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>4</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		