Transportation
Land Development
Environmental
Energy
Services

7056 US Route 7
Post Office Box 120
North Ferrisburgh, Vermont 05473
802.497.6100
Fax 802.425.7799

Memorandum

To: TDI-NE / New England Clean Power Link Project File

Date: November 7, 2014

Project No.: 57666.00

From: Chelsea Martin, Wetland Scientist

Re: TDI-NE / New England Clean Power Link Wetland and Waters Delineation

---

At the request of TDI-New England ("TDI-NE") (doing business in Vermont as Champlain VT, LLC), Vanasse Hangen Brustlin, Inc. and TRC Environmental ("VHB/TRC") conducted natural resources studies for the proposed New England Clean Power Link ("NECPL" or "Project"). The Project is a proposed 1,000 MW DC high-voltage direct current ("HVDC") electric power transmission system that will have both aquatic (underwater) and terrestrial (underground) segments in Vermont. The NECPL will connect clean power sources from Canada to the ISO-NE system via a substation located in Ludlow, VT. The planned transmission line, which would run entirely through Vermont, would originate in the United States at the U.S./ Canadian border in Alburgh, Vermont and continue under the waters of Lake Champlain to Benson, Vermont (aquatic segment) then continue overland, primarily in public rights-of-way, to a proposed HVDC convertor station in Ludlow, Vermont and then proceed to the VELCO Coolidge Substation in Cavendish, Vermont (terrestrial segment) (see NECPL Index Map, Appendix 1). This technical memorandum describes wetland and waters delineation study methods and results within the areas studied by VHB/TRC for the terrestrial component of the Project for the purpose of providing supporting documentation for federal Clean Water Act Sections 404/401 regulatory requirements. The supporting attachments, which summarize the results of the wetland and stream studies, include:

- Attachment 1 - Natural Resources Maps,
- Attachment 2 - Summary of Delineated Streams
- Attachment 3 - Summary of Delineated Wetlands, and
- Attachment 4 - U.S. Army Corps of Engineers ("USACE") Wetland Determination Data Forms.

PROJECT DESCRIPTION

The terrestrial portion of the proposed NECPL transmission line traverses through portions of thirteen towns in Rutland and Windsor Counties and one town in Grand Isle County, Vermont. From the US/Canadian border in Alburgh, Vermont, the HVDC transmission line will be located

underground for approximately 0.5 mile, within roadway right-of-way ("ROW")and overland. The HVDC transmission system, consisting of two parallel cables, will then enter Lake Champlain via horizontal directional drilling ("HDD") and will be installed within the lake for approximately 98 miles to the southern end of Lake Champlain in the Town of Benson where the HVDC transmission line will exit the water via HDD onto a private land parcel. From there, the transmission line would traverse through 13 towns from Benson to Cavendish and would be installed largely within existing town and/or state roadways/railroads or the associated ROW. Use of the previously disturbed roadway/railroad ROW will allow the Project to avoid and minimize impacts to natural resource features. Furthermore, unavoidable impacts would occur primarily to natural resource features that have been previously impacted due to road/railroad construction and ongoing operational management activities. The HVDC transmission line would terminate at a proposed converter station location proposed to be built on privately-owned lands off Nelson Road in Ludlow, Vermont. A short segment of alternating current ("AC") cable would continue from the proposed convertor station to the VELCO Coolidge substation.

As currently planned, the cables would be installed underground within the terrestrial segment as follows:

- Bay Road in Alburgh, VT north of Vermont Route 2 (0.5 mile)
- Benson town roads (in ROW or within road) west of Vermont Route 22A (4.4 miles)
- Vermont Route 22A ROW south to Vermont Route 4 in Fair Haven (8.1 miles)
- Vermont Route 4 ROW east to U.S. Route 7 in Rutland (17.2 miles)
- U.S. Route 7 ROW south to Vermont Route 103 in North Clarendon (2.6 miles)
- Vermont Route 103 ROW south/southeast to the RR option in Shrewsbury (3.9 miles)
- Green Mountain Railroad ("GMR") ROW in Shrewsbury to Vermont Route 103 in Shrewsbury (3.5 miles)
- Vermont Route 103 ROW to Vermont Route 100 in Ludlow (10.4 miles)
- Vermont Route 100 ROW north to Ludlow town roads (0.8 mile)
- Ludlow town roads to proposed HVDC converter station (4.8 miles)
- HVDC Convertor station to VELCO Coolidge Substation (0.3 mile)

ASSESSMENT METHODOLOGIES

Prior to conducting wetland and waters delineations, VHB/TRC developed a field delineation protocol for the Project which was presented to and reviewed by staff with both the Vermont Agency of Natural Resources and the USACE prior to the initiation of fieldwork in Spring 2014. Both review agencies approved of the field protocol. The following sections provide more detail on the specific methodologies used for waters and wetland delineations for the Project.

WATERS

VHB/TRC Environmental Scientists conducted stream and open water delineations and assessment work along the terrestrial portions of the transmission line as well as potential additional workspaces and/or material staging areas in May to early November 2014.

Streams are identified according to federal delineation procedures (USACE 2005) and were flagged with blue survey tape. Flagging was coded with the consultant identification ("T" for TRC or "V" for VHB), Town Name Abbreviation (e.g., "WR" for West Rutland) and stream number, along with the specific flag number (e.g., T-WR-S-1-1). Generally, perennial and intermittent streams (channels 6 feet or wider) are flagged along the stream Top-of-Bank ("TB") or Top-of-Slope ("TS"), according to guidelines in the *Guidance for Agency Act 250 and Section 248 Comments Regarding Riparian Buffers* (ANR 2005). Narrow features, including most ephemeral channels, are flagged along the center line. Ditches or constructed ponds are typically not included in the delineation if such features are due to excavation from upland. However, such features were included in the delineation if these features were determined to be modified, naturally occurring streams or wetlands that would meet federal criteria for jurisdiction. Stream flags were located in the field using a Trimble® GPS unit capable of sub-meter accuracy and post-processed using Trimble® Pathfinder software. Stream identification and ordinary high water ("OHW") width were also assessed, according to methods detailed in the "Regulatory Guidance Letter: Subject – Ordinary High Water Identification" (USACE 2005). The OHW width for each channel segment is determined from an average of measurements of bank-to-bank OHW widths taken at regular intervals along the surveyed portion of the watercourse. During field work, flow regimes are preliminarily classified as perennial, intermittent, ephemeral or jurisdictional ditch and are determined based on qualitative observations of instream hydrology indicators at the time of observation and existing geomorphic characteristics.

Open waters, such as those associated with Lake Champlain and Lake Bomoseen, are delineated along the field-determined ordinary-high-water levels.

In addition to areas VHB/TRC had access to detailed field delineations, an area 50-feet wide off most detailed delineation areas was added in order to approximate the boundaries of potential water resources. Such "Approximate Study Areas" are indicated on the maps in Attachment 1. Approximated resources are based on a combination of information gathering from off-site lands during field site visits with reconnaissance-level verification and mapping from off-site resource review/interpretation.

WETLANDS

VHB/TRC field staff conducted wetland delineation work from May to early November 2014. Wetland delineations were made pursuant to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Routine Determination Method*

(USACE 2011). Wetlands were identified in the field with pink "Wetland Delineation" flagging. Field notes were taken to record information relative to wetland classifications under the 2010 Vermont Wetland Rules ("VWR"), general characteristics, potential functions and values of the wetland, any unique characteristics observed during the site assessment, along with other considerations relevant to support site findings. Wetlands were also classified in accordance with the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, et al. 1979). Wetland functions criteria were qualitatively evaluated based on the field notes and observations according to the VWR Section 5 (Functional Criteria for Evaluating a Wetland's Significance) (NRB 2010). Wetland features were located in the field with the same equipment and methods as for waters.

In addition to areas VHB/TRC had access to detailed field delineations, an area 50-feet wide off most detailed delineation areas was added in order to approximate the boundaries of potential wetland resources. Such "Approximate Study Areas" are indicated on the maps in Attachment 1. VHB/TRC utilized a combination of off-site review (including aerial photography, available topography, soil survey maps, VSWI-mapping, previous delineations etc.), and mapping, to conservatively assess the extent of any wetland features.

In May 2014, VHB/TRC Environmental Scientists also conducted a survey for vernal pool sites according to the definitions of and criteria for vernal pools provided by the USACE (2007) and Thompson and Sorenson (2005). There were either no observed vernal pool biological indicators, or other physical vernal pool characteristics present. Portions of the Project Study Area completed after May 2014 were assessed for the presence of potential vernal pools. This is further corroborated by surveys for Special Aquatic Sites completed in summer 2014 and reported separately by Arrowwood Environmental. From this, there are no vernal pools or potential vernal pools present within the Study Areas.

RESULTS:

Based on application of the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Routine Determination Method*, VHB/TRC identified and delineated wetlands and water resources within Project Study Areas (see the NECPL Natural Resources Series, Summary of Delineated Wetlands, and Summary of Delineated Streams, Attachment 2). The following sections give a general description of the wetland and water resources identified. With the exception of the GMR railroad corridor study area in Shrewsbury as well as some additional work spaces and material staging areas that have not been field reviewed, the results of VHB/TRC delineations have been field-reviewed by USACE and Vermont Department of Environmental Conservation ("VT DEC") personnel in July and August 2014, including an overview of the terrestrial segment of the Project.

STREAMS AND JURISDICTIONAL DITCHES:
VHB/TRC conducted stream delineations throughout the Study Area and identified a variety of perennial, intermittent, ephemeral streams and jurisdictional ditches (see Natural Resource Index and Series for stream mapping, Attachment 1). Streams range in size from mapped Vermont Hydrography Dataset ("VHD") streams and rivers, to small streams and channelized/ditched segments within agricultural or residential settings. The major water courses within the Study Area include the Hubbardton River, Mud Brook, North Brenton Brook, Castleton River, Clarendon River, Otter Creek, Cold River, Mill River, Freeman Brook, Branch Brook, Coleman Brook, and Black River. VHB analyzed the mapped VHD streams within the Project Study Area to determine watershed sizes in the context of potential review by the VT DEC Rivers Management Program under the Vermont Stream Alteration regulatory program (WMD 2014b). As part of this review, VHB also reviewed the Vermont Water Quality Standards ("VWQS") (WMD 2014a) to determine the classifications of the streams throughout the NECPL alignment. The NECPL Stream Summary spreadsheets provide details on each stream feature or segment, which include ditches that could be considered under federal jurisdiction (see the NECPL Natural Resource Series Maps in Attachment 1, and the NECPL Stream Summary Spreadsheets in Attachment 2). The data provided in the NECPL Stream Summary Spreadsheet include:

- VHB/TRC Stream ID,
- Stream Name [Geographic Names Information System ("GNIS")],
- Town,
- Average OHW,
- Potential Flow Regime (Perennial, Intermittent, Ephemeral, Ditch) or Open Water,
- Watershed Size > 0.5 mile (yes/no), and
- Impaired or Priority Waters.

All delineated streams and rivers are Vermont Class B waters, as designated by the 2014 VWQS (see Stream Summary Spreadsheet, Attachment 2).

Project impacts to federally jurisdictional waters, including streams, will likely require a Department of the Army Section 404 Individual Permit. Lake Champlain would be considered a navigable water under the Section 10 of the Rivers and Harbors Act. "Navigable waters of the United States" are "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. 33 C.F.R. § 329.4. The Project crosses the Otter Creek, which is a Section 10 Navigable Water, but the crossing occurs in Rutland, Vermont, which is upstream of the limits of Section 10 jurisdiction in Proctor, Vermont.

WETLANDS:

Wetland delineations included a variety of wetland features across different cover classes (see the NECPL Natural Resources Map, Attachment 1; and Wetland Summary Table, Attachment 3) There were no vernal pools or potential vernal pools identified as part of the survey conducted in May 2014 and corroborated by further studies through early November 2014. The wetland delineation also included assessments for the classification of wetlands per the VWR. As part of the field studies, all wetland features were delineated within the Study Areas, several of which are not distinct wetlands, but rather components of larger on or off-Study Area complexes (see the NECPL Natural Resource maps in Attachment 1). The Summary of Delineated Wetlands table in Attachment 3 details wetland characteristics relative to the criteria for classifying significant wetlands under the 2010 VWR, as well as other summary data including:

- VHB Wetland ID,
- Town,
- Cowardin Classification,
- Contiguous to mapped VSWI (Yes/no),
- Delineation Area (Square Feet), and
- Proposed VWR Classification.

Vermont Wetland Evaluation Forms were used as guidance to determine which functions are provided by each delineated wetland. From which proposed Class II wetlands are found to meet one or more of the VWR Section 5:

- 5.1 Water Storage for Flood Water and Storm Runoff,
- 5.2 Surface and Ground Water Protection,
- 5.4 Wildlife Habitat,
- 5.5 Exemplary Wetland Natural Community,
- 5.6 Rare Threatened and Endangered Species Habitat,
- 5.7 Education and Research in Natural Sciences,
- 5.8 Recreational Value and Economic Benefits,
- 5.9 Open Space and Aesthetics, and
- 5.10 Erosion Control through Binding and Stabilizing the Soil.

Data was collected in the field in order to complete USACE Wetland Determination Forms (Attachment 4) for representative delineated wetlands throughout the Study Area. As part of this effort, determination forms were also completed within representative upland areas within the Study Area to document non-wetland conditions on representative boundaries.

ATTACHMENTS:

- Attachment 1- NECPL Natural Resources Index and Series maps

- Attachment 2- Summary of Delineated Streams/Waters
- Attachment 3 - Summary of Delineated Wetlands
- Attachment 4 - USACE Wetland Determination Data Forms

REFERENCES

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitat of the United States*. U.S. Fish and Wildlife Service. FWS/OBD-79/31. 103pp.

USACE. 2005. "Regulatory Guidance Letter. Subject: Ordinary High Water Mark Identification." No. 05-05. Available online at: http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl05-05.pdf

USACE. 2011. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeastern Region (Version 2.0)*, ed. J.S. Wakely, R.W. Lichvar, C.V. Noble, and J.F.Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

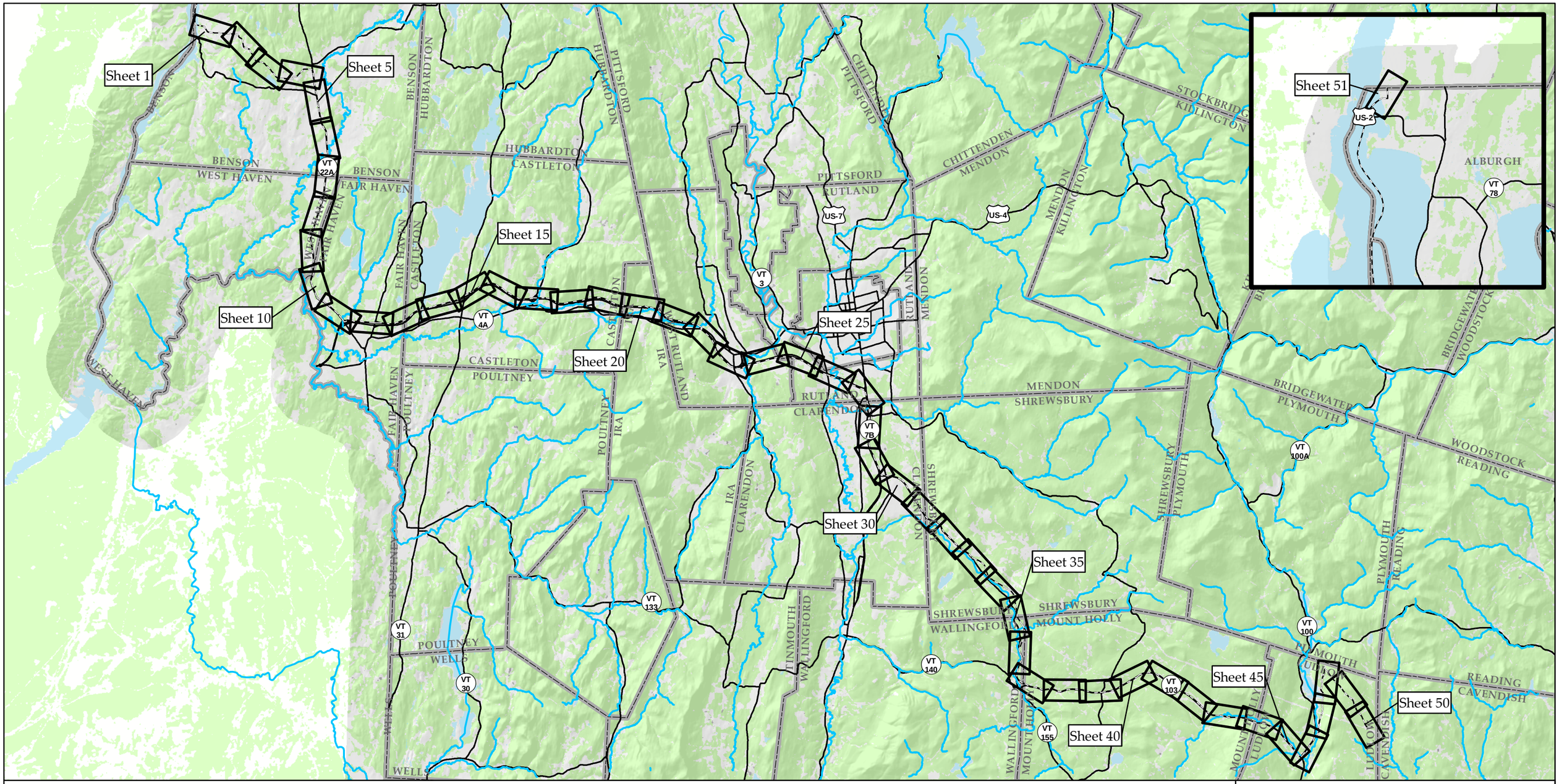
ANR. 2005. *Guidance for Agency Act 250 and Section 248 Comments Regarding Riparian Buffers*. December 9, 2005. Available online at: http://www.anr.state.vt.us/site/html/buff/BufferGuidanceFINAL-120905.pdf.

Vermont Natural Resources Board (NRB). 2010. Vermont Wetland Rules. Effective August 1, 2010. Available online at: http://www.nrb.state.vt.us/wrp/rulemaking/wetlands2010/filedruledocs/VWR%207-16-10.pdf

Vermont Agency of Natural Resources – Watershed Management Division (WMD). 2014a. Vermont Water Quality Standards. Environmental Protection Rule Chapter 29. Available online at: http://www.anr.state.vt.us/dec/rulessum.htm.

Vermont Agency of Natural Resources – Watershed Management Division (WMD). 2014b. Stream Alteration Permits website: http://www.watershedmanagement.vt.gov/permits/htm/pm_streamalt.htm

ATTACHMENT 1



Sources: Land Use Land Cover & Hillshade provided by VCGI (2002); Statewide datasets provided by VCGI: Roads by VTrans (2013); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), County and Town Boundaries by VCGI (2012), Provided by TRC: Conceptual Project Alignment (2014)

- NECPL Proposed Alignment (TRC)
- Streams (VHD)
- Sheet Outline
- Waterbody (VHD)
- Roads
- Town Boundary (VCGI)
- County Boundary (VCGI)

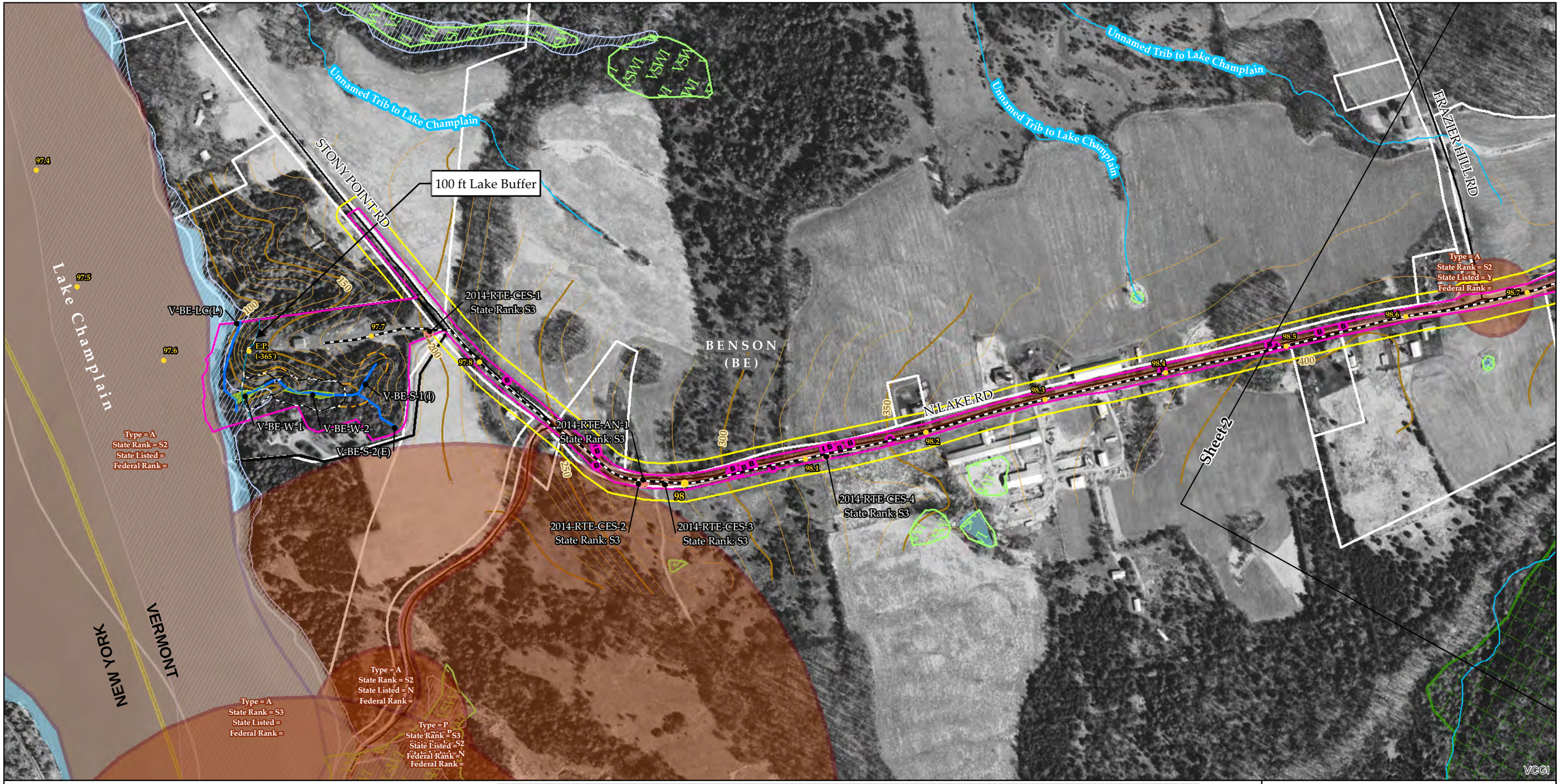
N

2 1 0 2 Miles

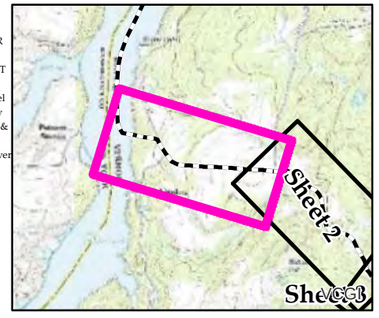
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series Index

November 6, 2014

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_INDEX.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

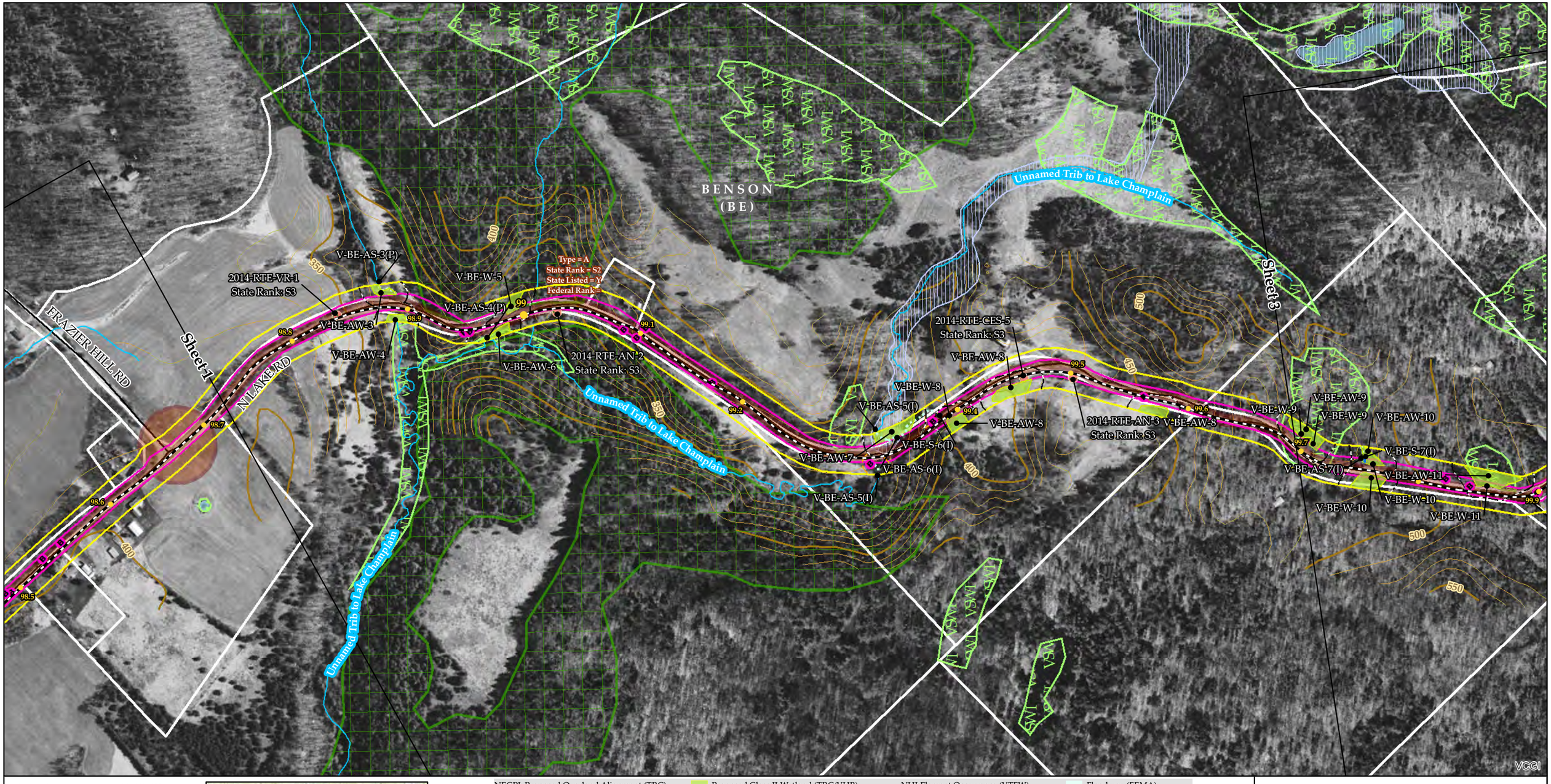
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 1 of 51

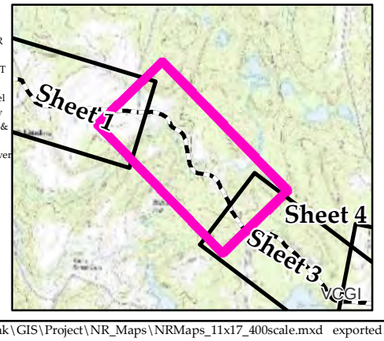
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

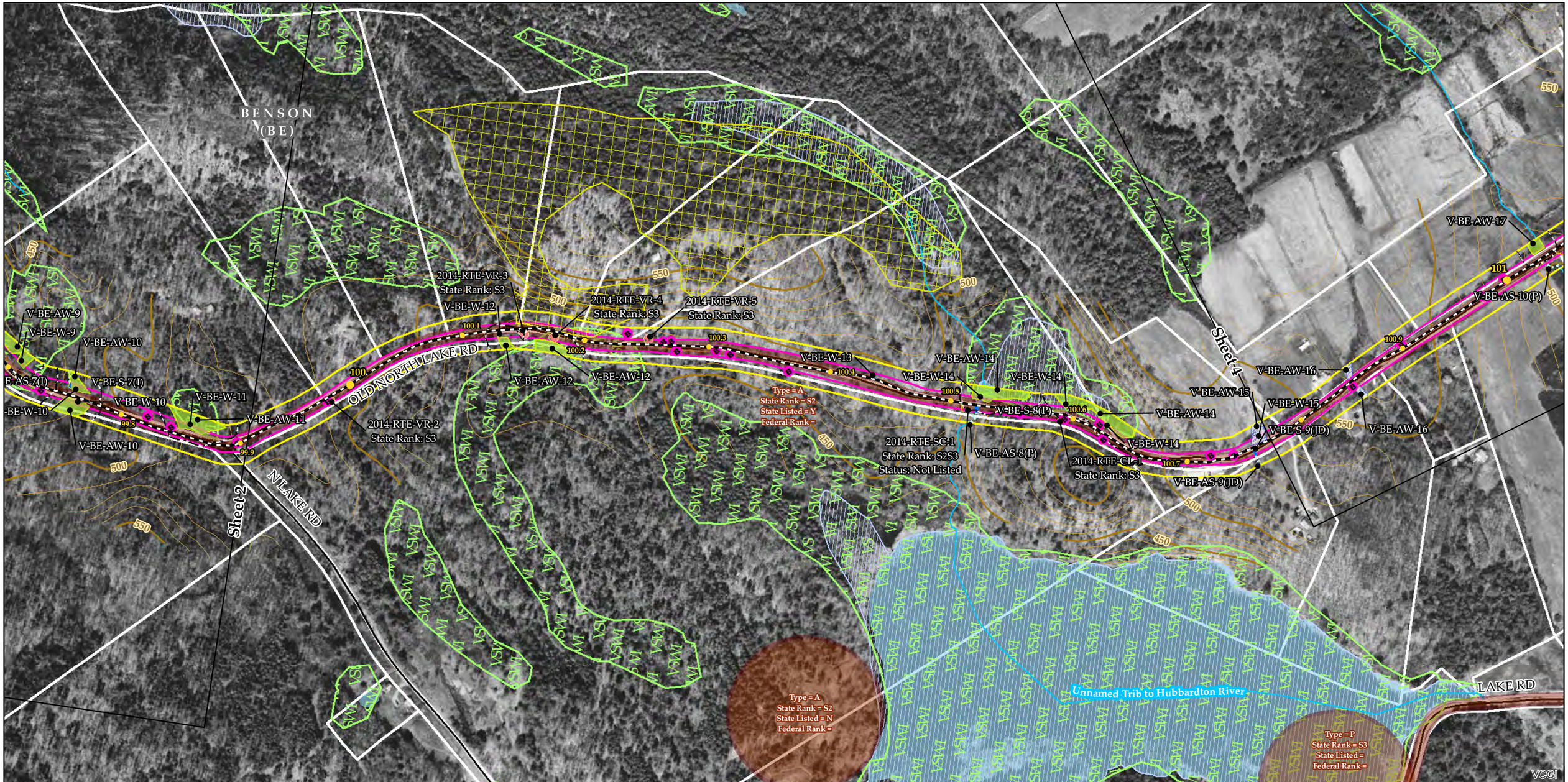
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 2 of 51

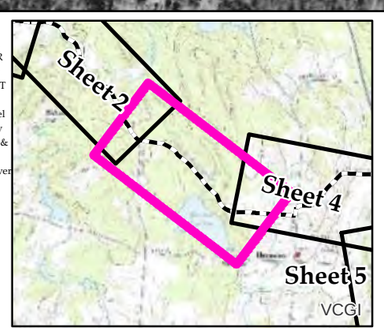
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

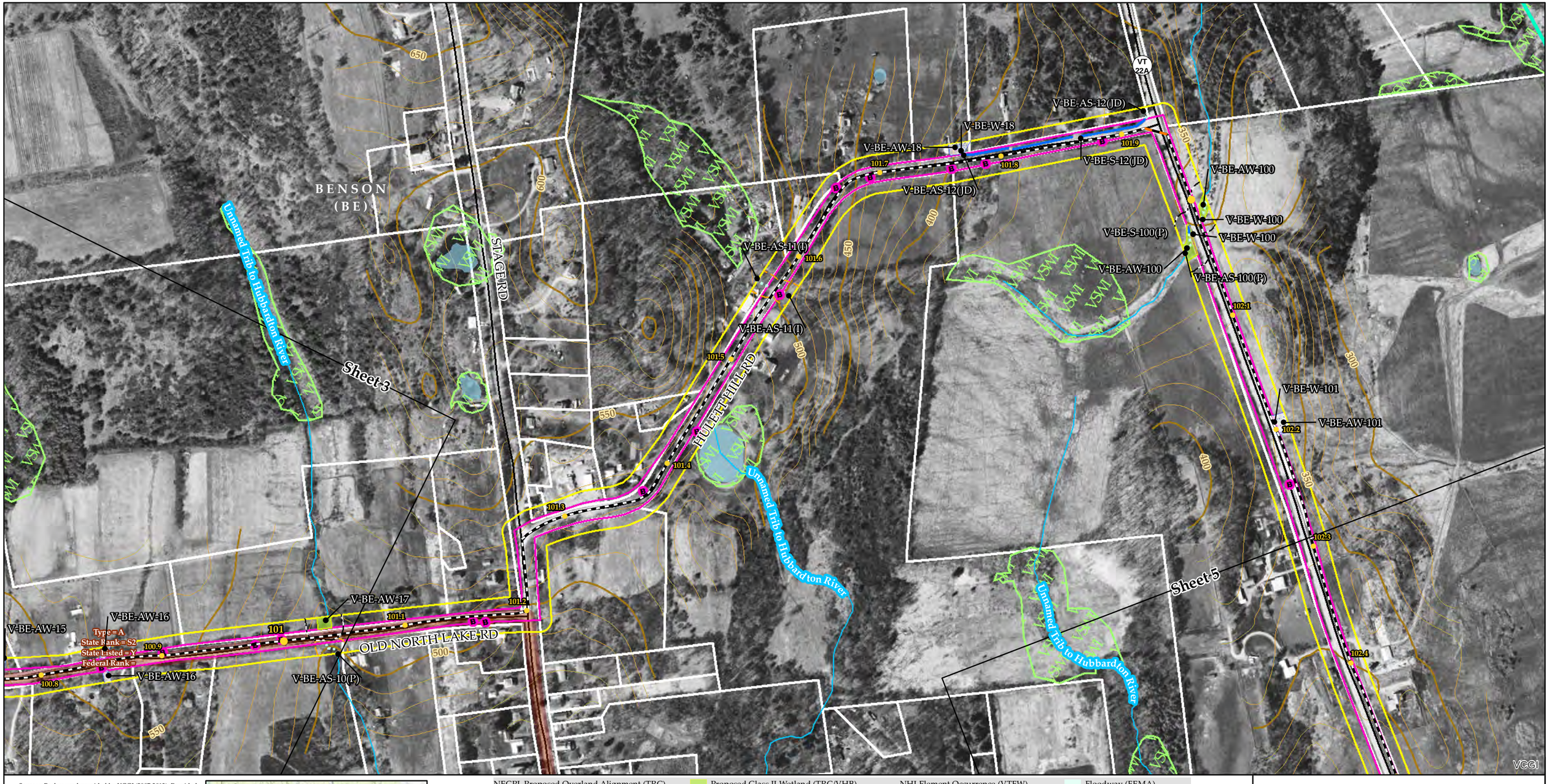
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 3 of 51

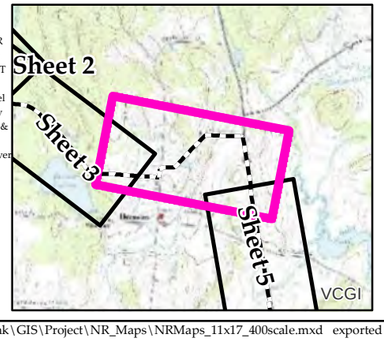
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 4 of 51

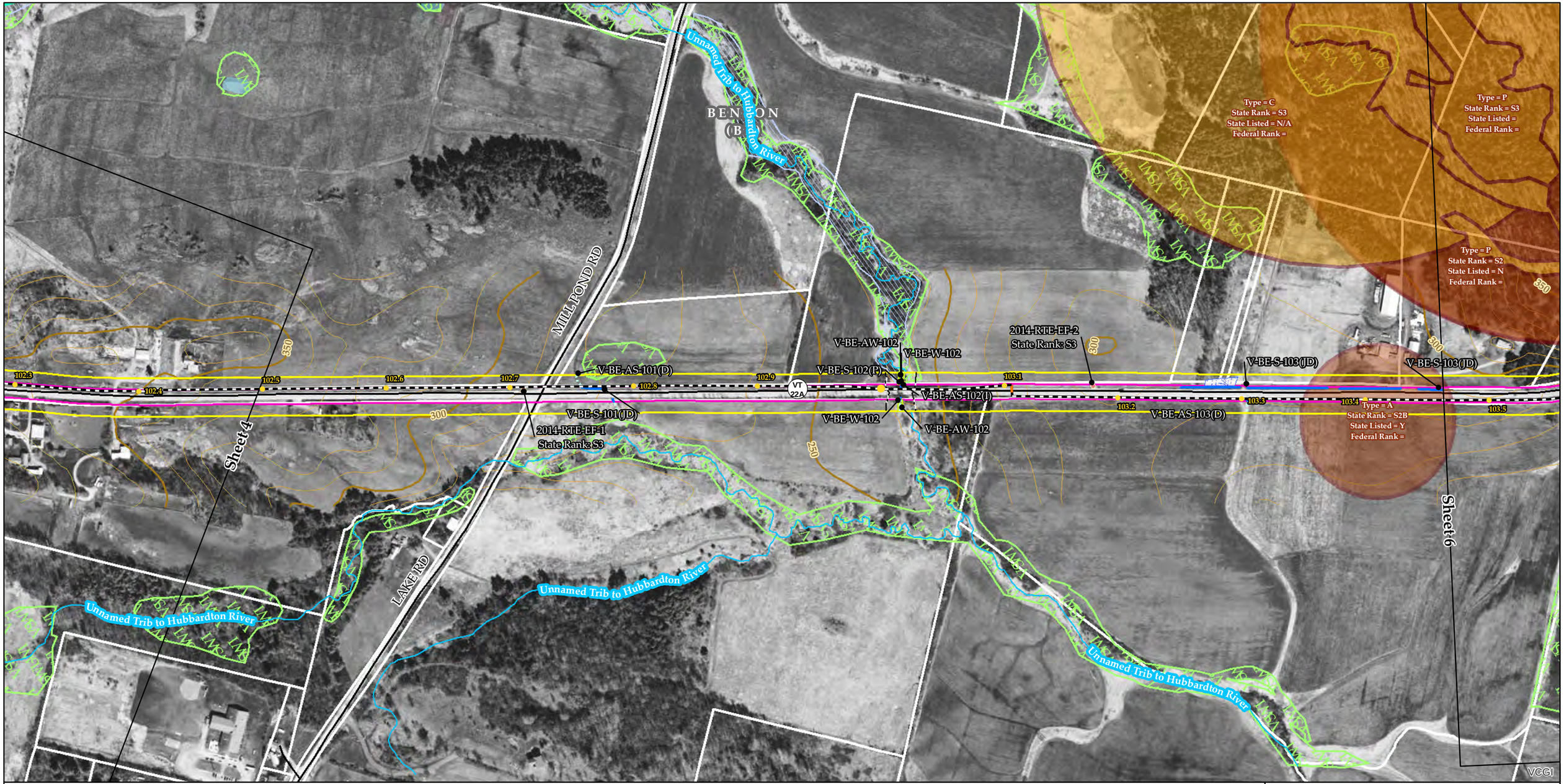
November 6, 2014

N

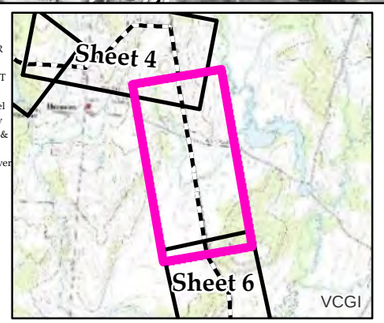
400 200 0 400

Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

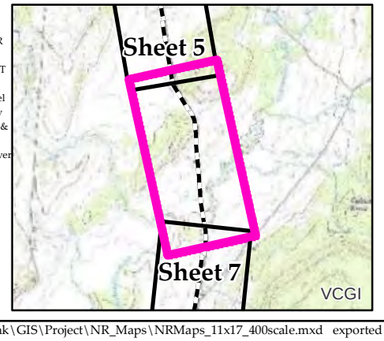
Sheet Number 5 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

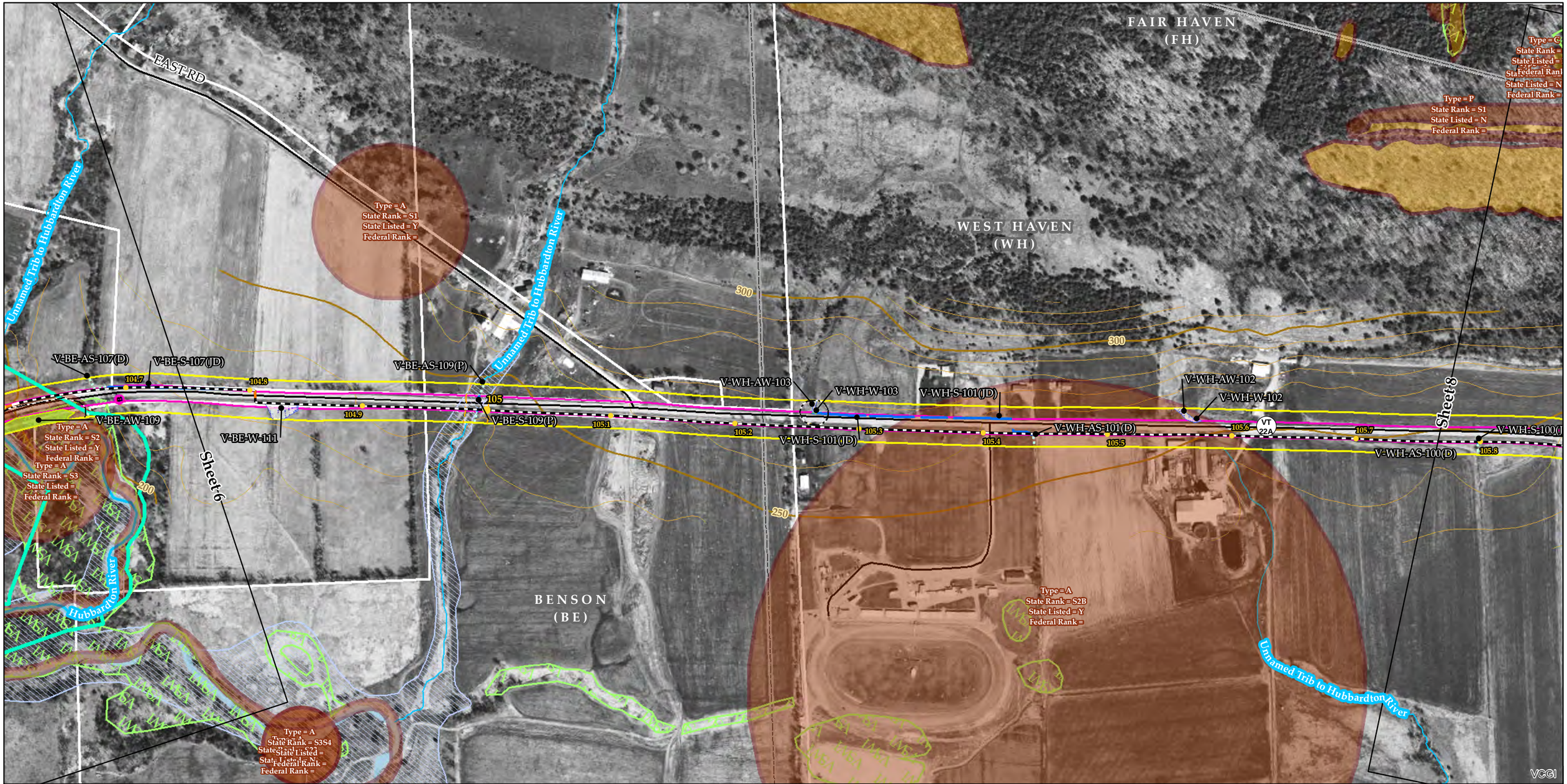
Sheet Number 6 of 51

November 6, 2014

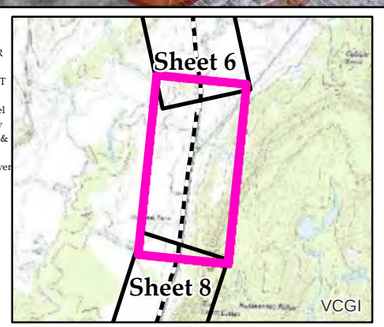
400 200 0 400

Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

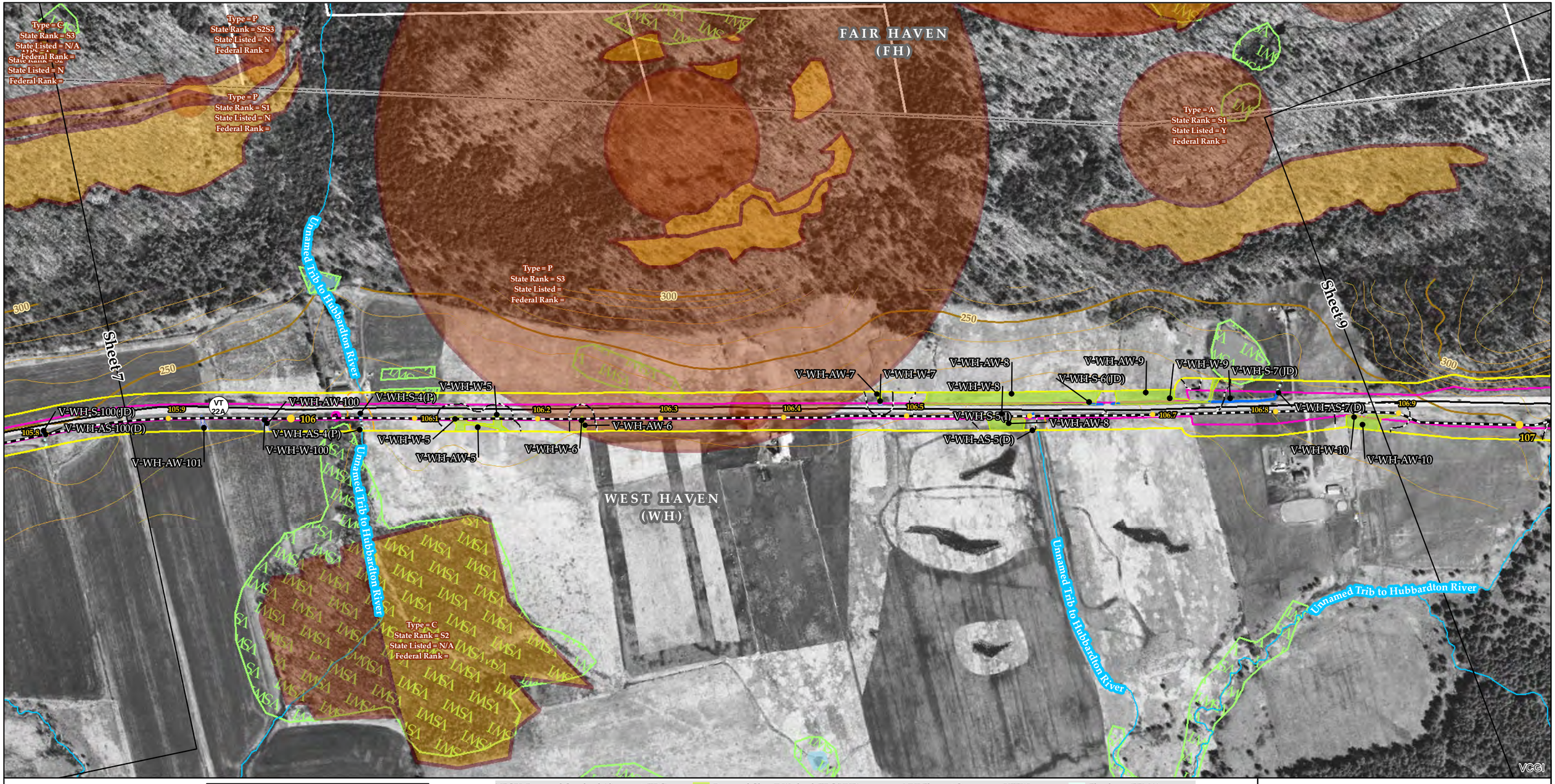
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 7 of 51

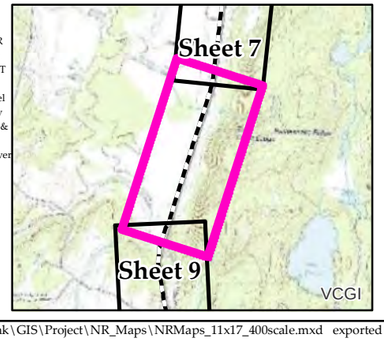
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

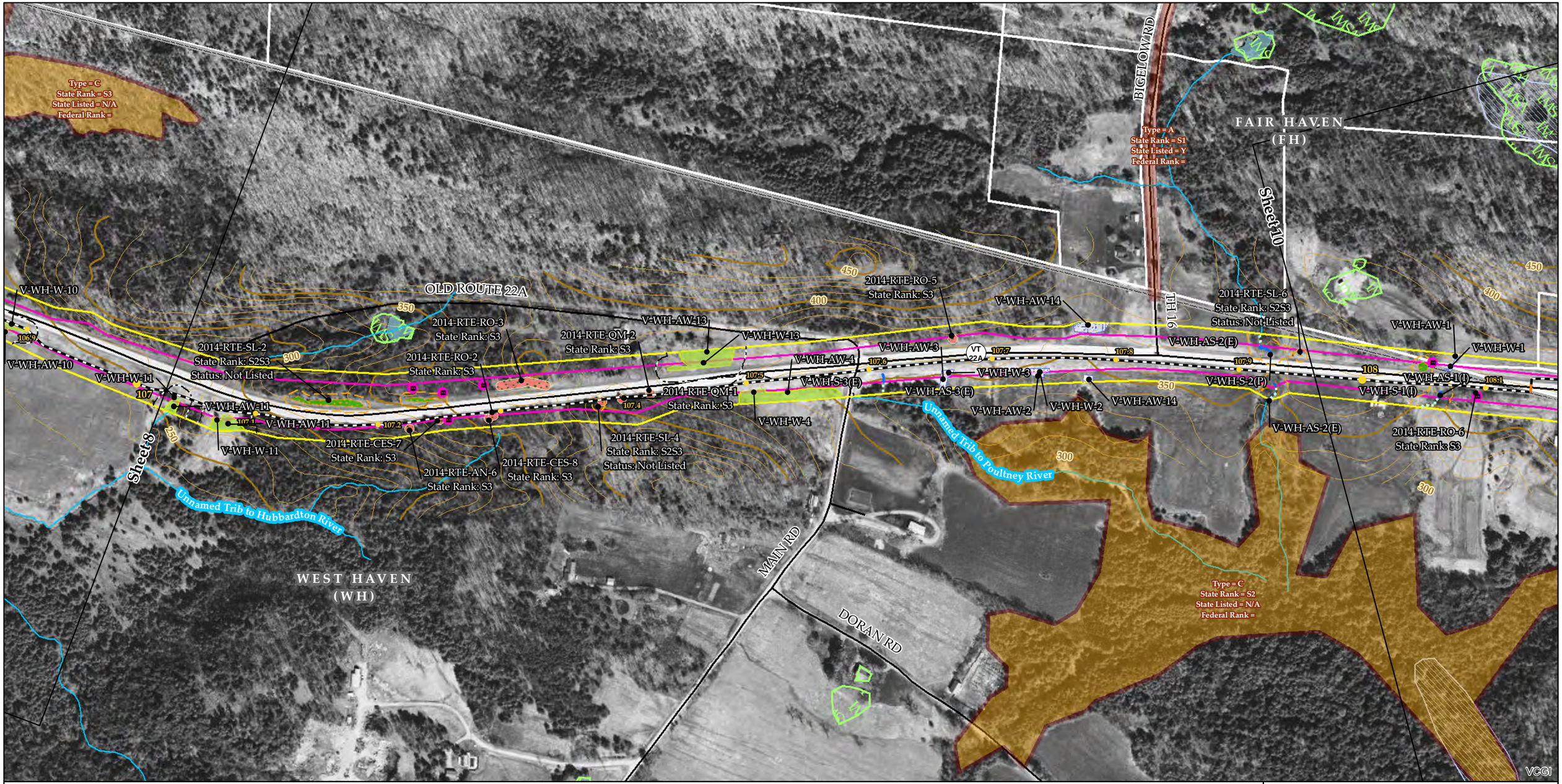
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 8 of 51

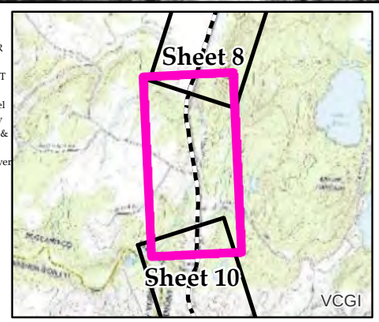
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (TRC/VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

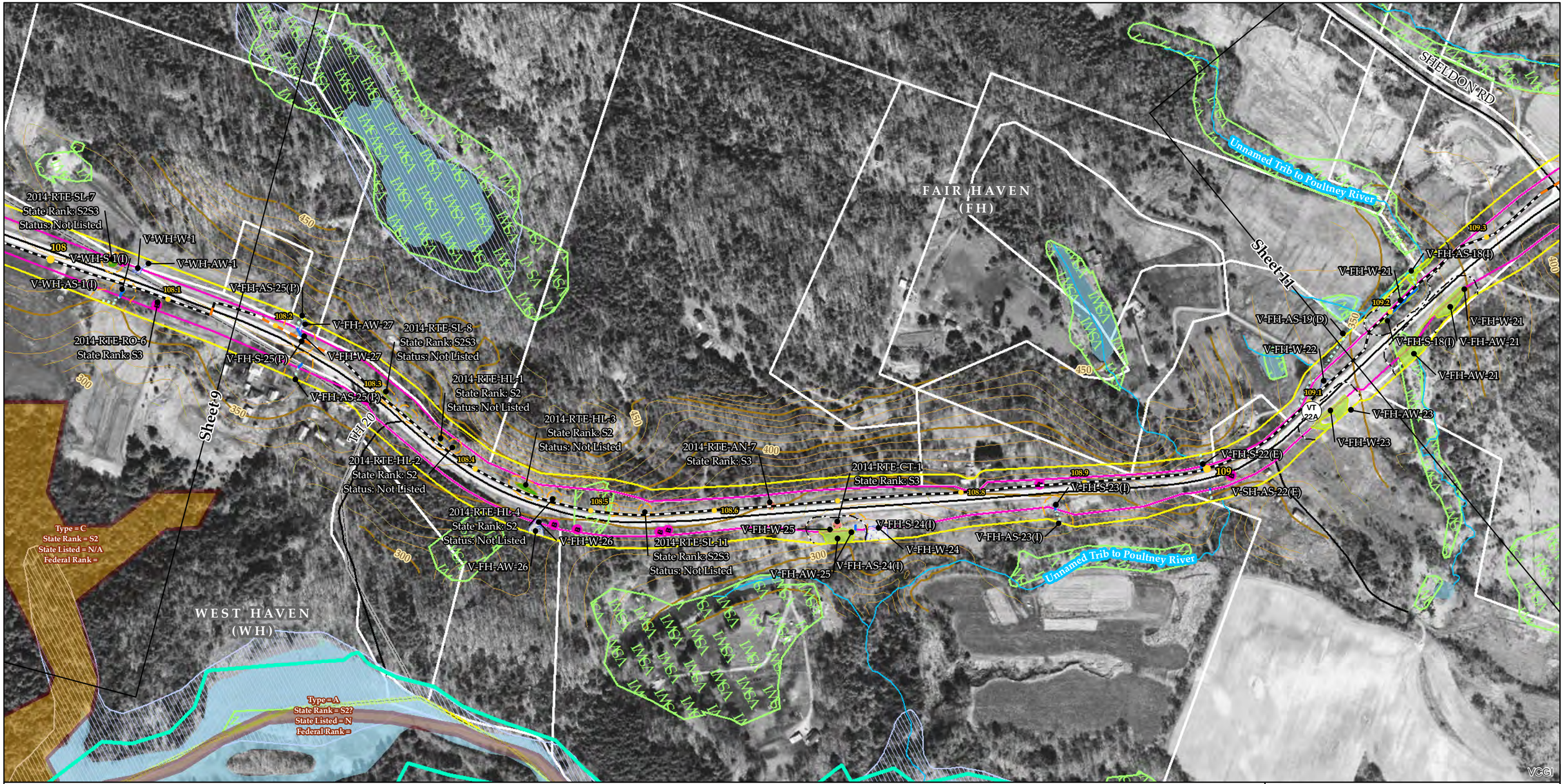
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 9 of 51

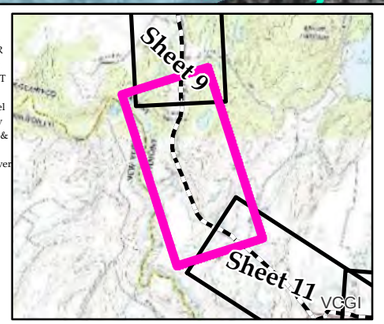
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

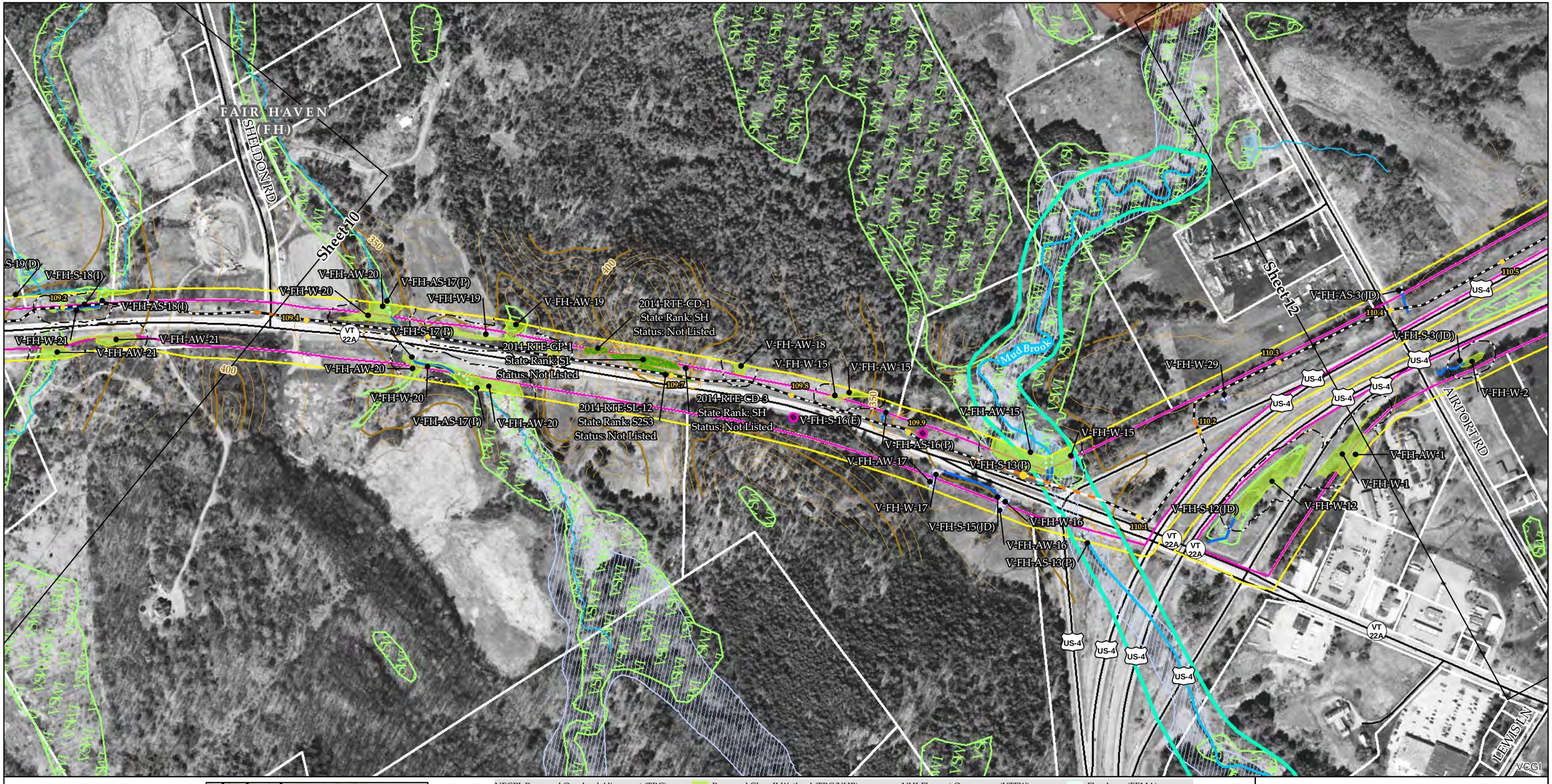
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 10 of 51

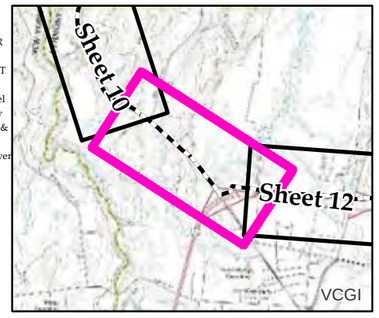
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

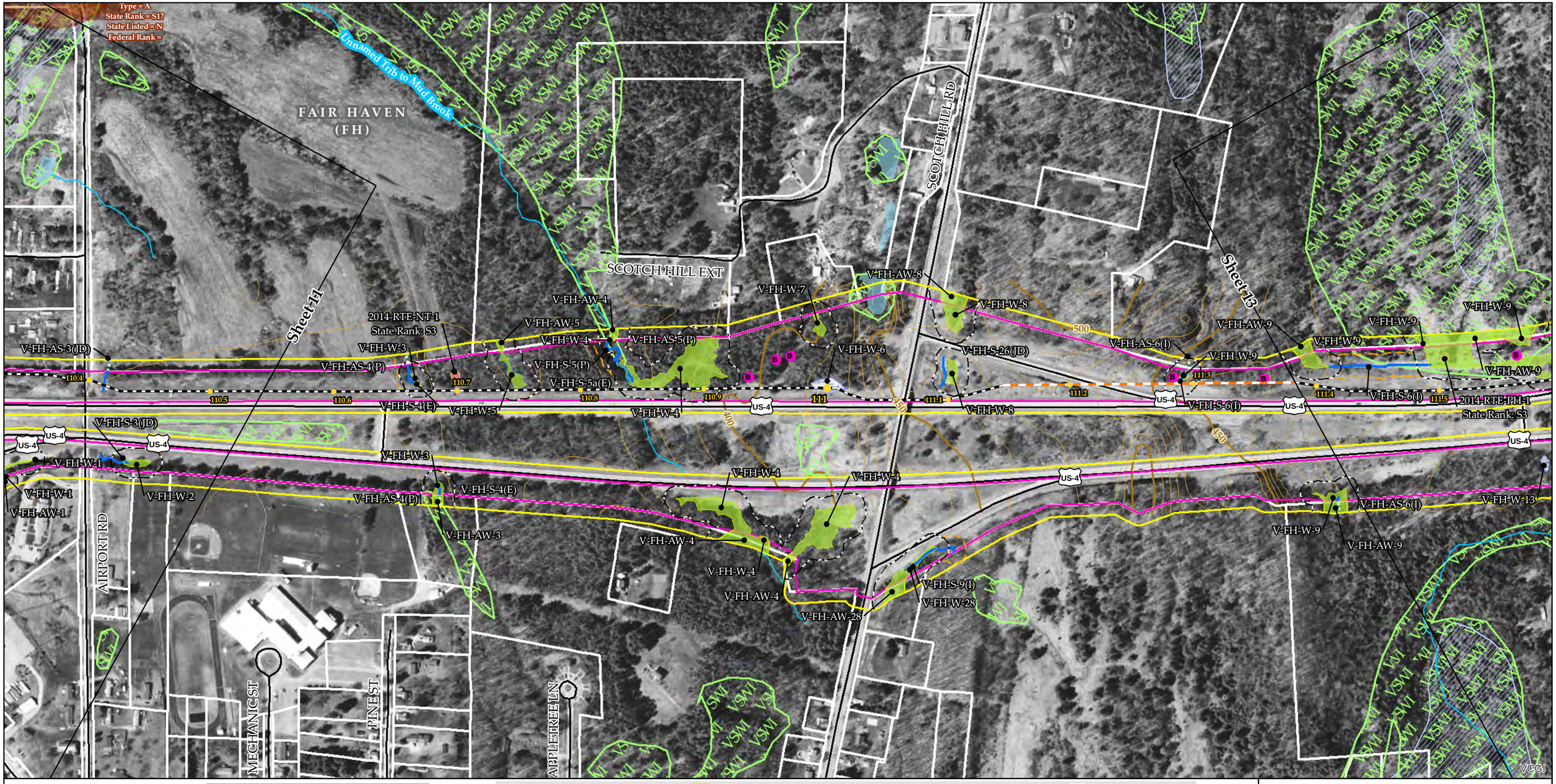
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 11 of 51

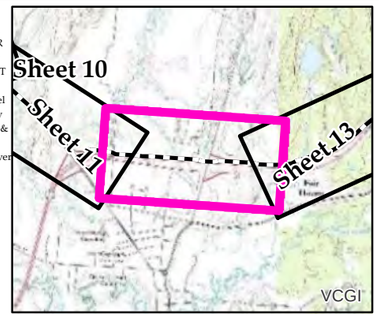
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

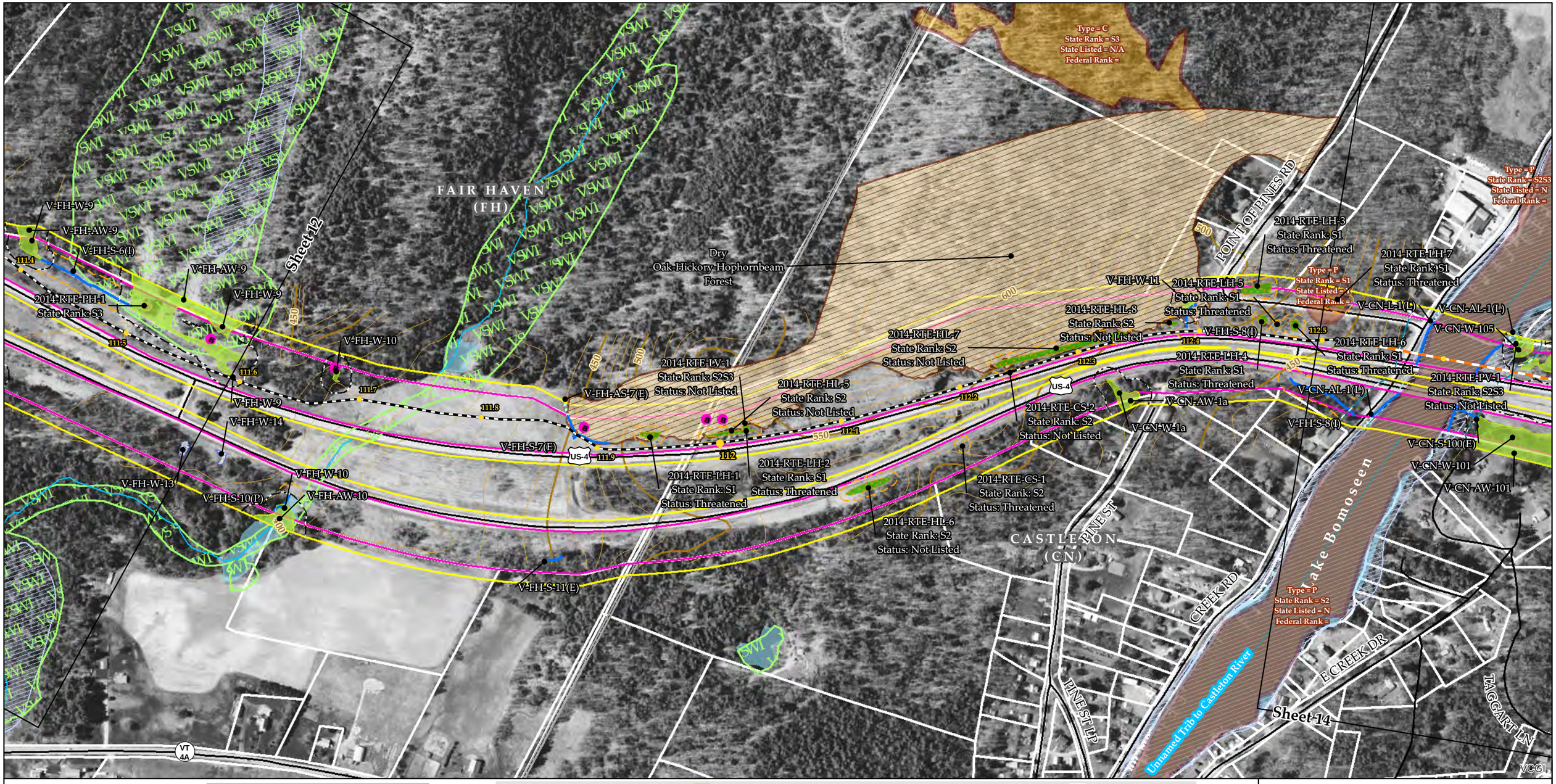
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 12 of 51

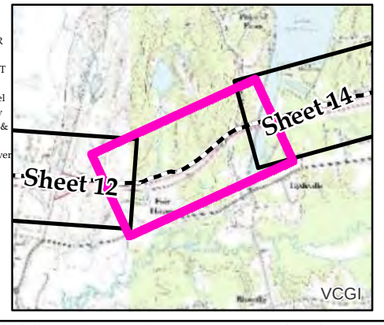
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

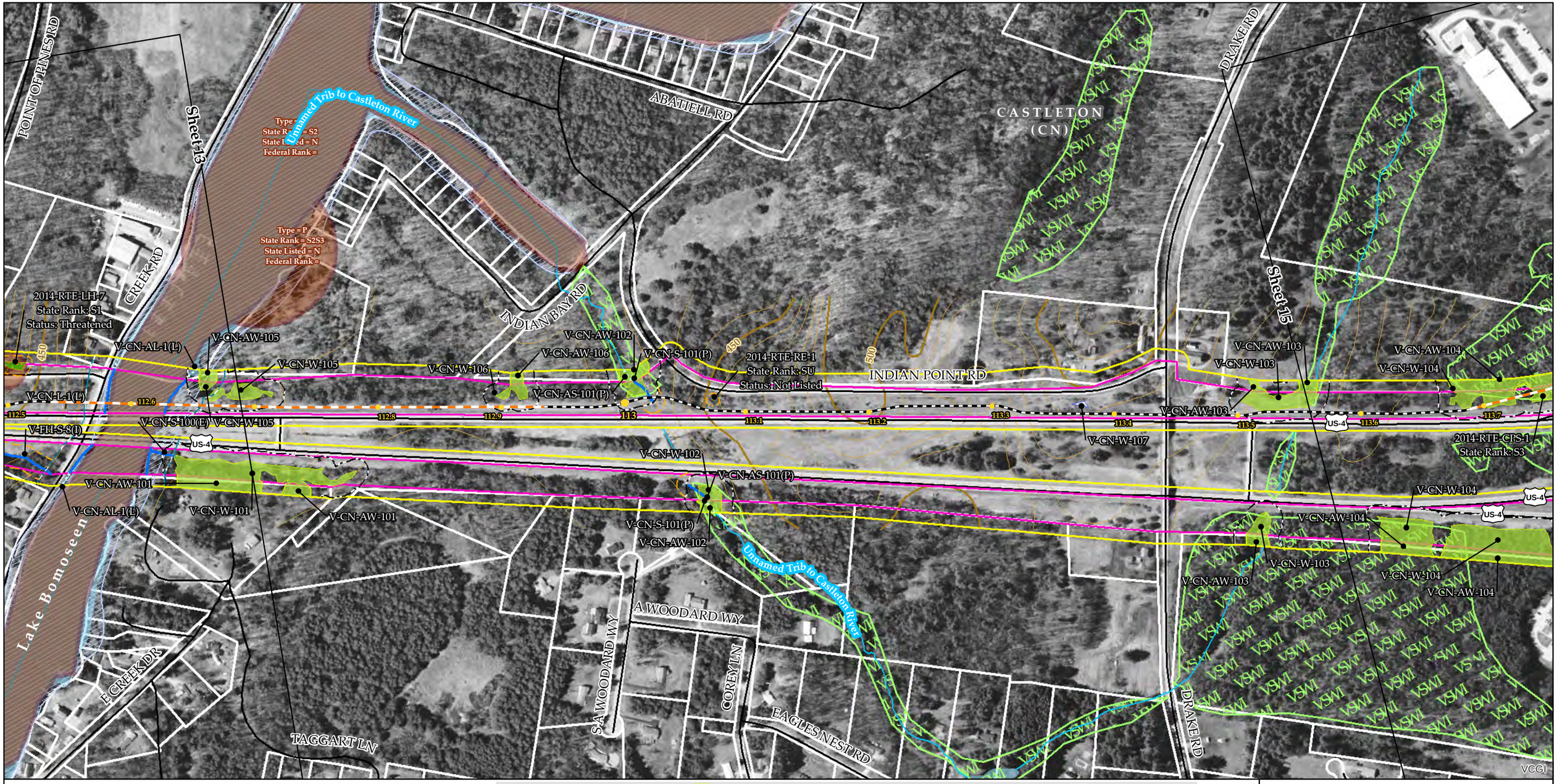
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 13 of 51

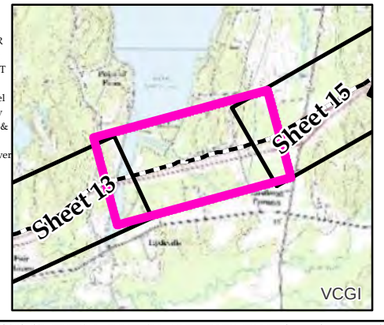
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

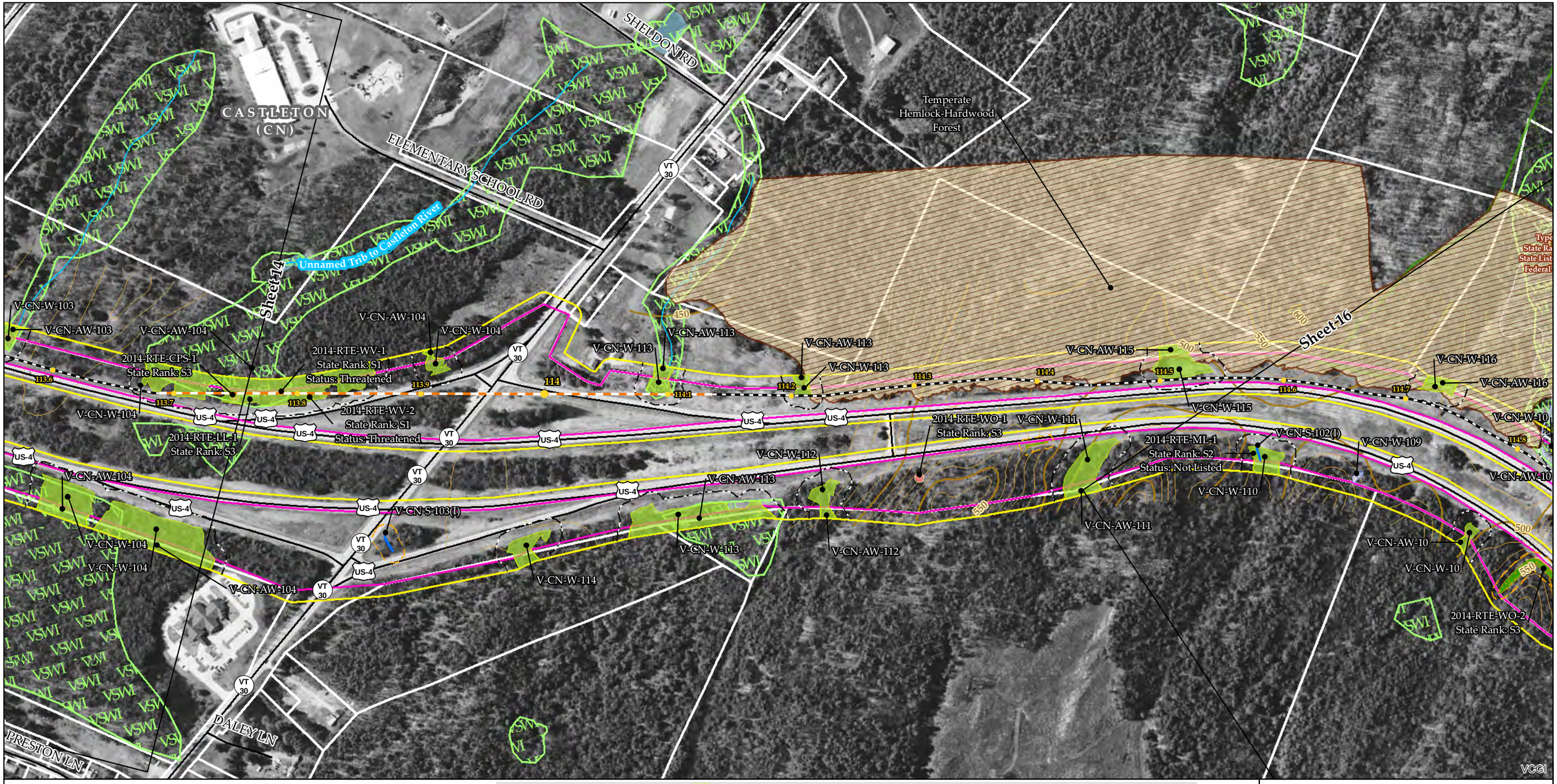
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 14 of 51

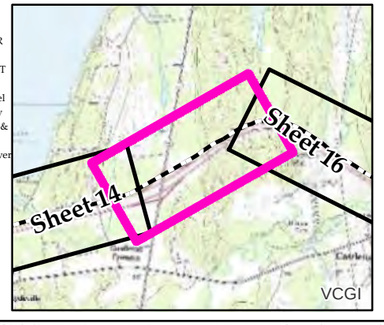
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 15 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

Type = C
State Rank = S4
State Listed = N/A
Federal Rank =

Temperate Hemlock Forest

Temperate Hemlock-Hardwood Forest

Unnamed Trib to Castleton River

CASTLETON (CN)

Sheet 17

Sheet 15

NORTH RD

BROWN FARM RD

MILL ST

Castleton River

V-CN-W-10
V-CN-AW-10
V-CN-W-11
V-CN-AW-11
V-CN-AS-11(I)
V-CN-W-12
V-CN-AW-12
V-CN-W-13
V-CN-AW-13
V-CN-AS-12a(E)
V-CN-S-12(P)
V-CN-W-14
V-CN-AW-15
V-CN-W-15
V-CN-AS-13(I)
V-CN-W-17
V-CN-AW-17
V-CN-W-16
V-CN-S-15(E)
V-CN-S-13(I)
V-CN-W-21
V-CN-W-116
V-CN-AW-116
2014-RTE-CO-1
State Rank: S3
2014-RTE-WO-2
State Rank: S3
V-CN-AS-1a(I)
2014-RTE-ML-2
State Rank: S2
Status: Not Listed
V-CN-S-11(I)
V-CN-AS-12(P)
V-CN-W-20
V-CN-AW-20
2014-RTE-CO-2
State Rank: S3
2014-RTE-BS-1
State Rank: S1S2
Status: Endangered
V-CN-AW-10
V-CN-S-102(I)
V-CN-W-109
V-CN-W-110
V-CN-AW-110
2014-RTE-ML-1
State Rank: S2
Status: Not Listed
V-CN-AW-111
2014-RTE-CB-1
State Rank: S3
V-CN-S-14(E)
V-CN-AS-14(E)

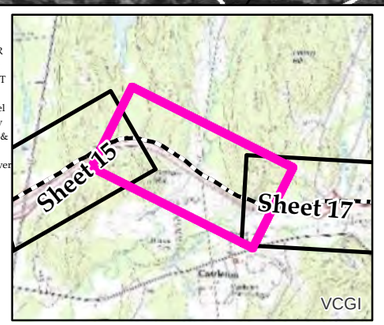
US-4

114.7 114.8 114.9 115 115.1 115.2 115.4 115.5 115.6 115.7 115.8 115.9 116 116.1 116.2 116.3 116.4 116.5 116.6

450 500 550 600

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb
TRC Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 16 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

CASTLETON (CN)

FRISBIE HILL RD

E HUBBARDTON RD

HIGGINS RD

CRAMTON RD

MILL ST

MAIN ST

Castleton River

North Breton Brook

Sheet 16

Sheet 18

Mesic Maple-Ash-Hickory-Oak Forest

Type = P
State Rank = S2
State Listed = N
Federal Rank =

Type = A
State Rank = S2
State Listed =
Federal Rank =

Type = A
State Rank = S3S4
State Listed =
Federal Rank =

2014-RTE-CPP-1
State Rank: S3

VT 4A

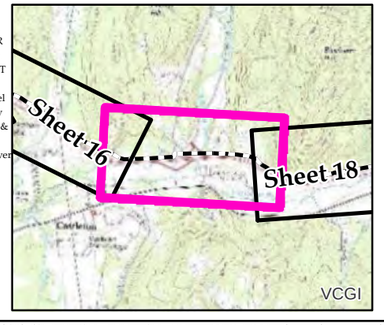
US-4

VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

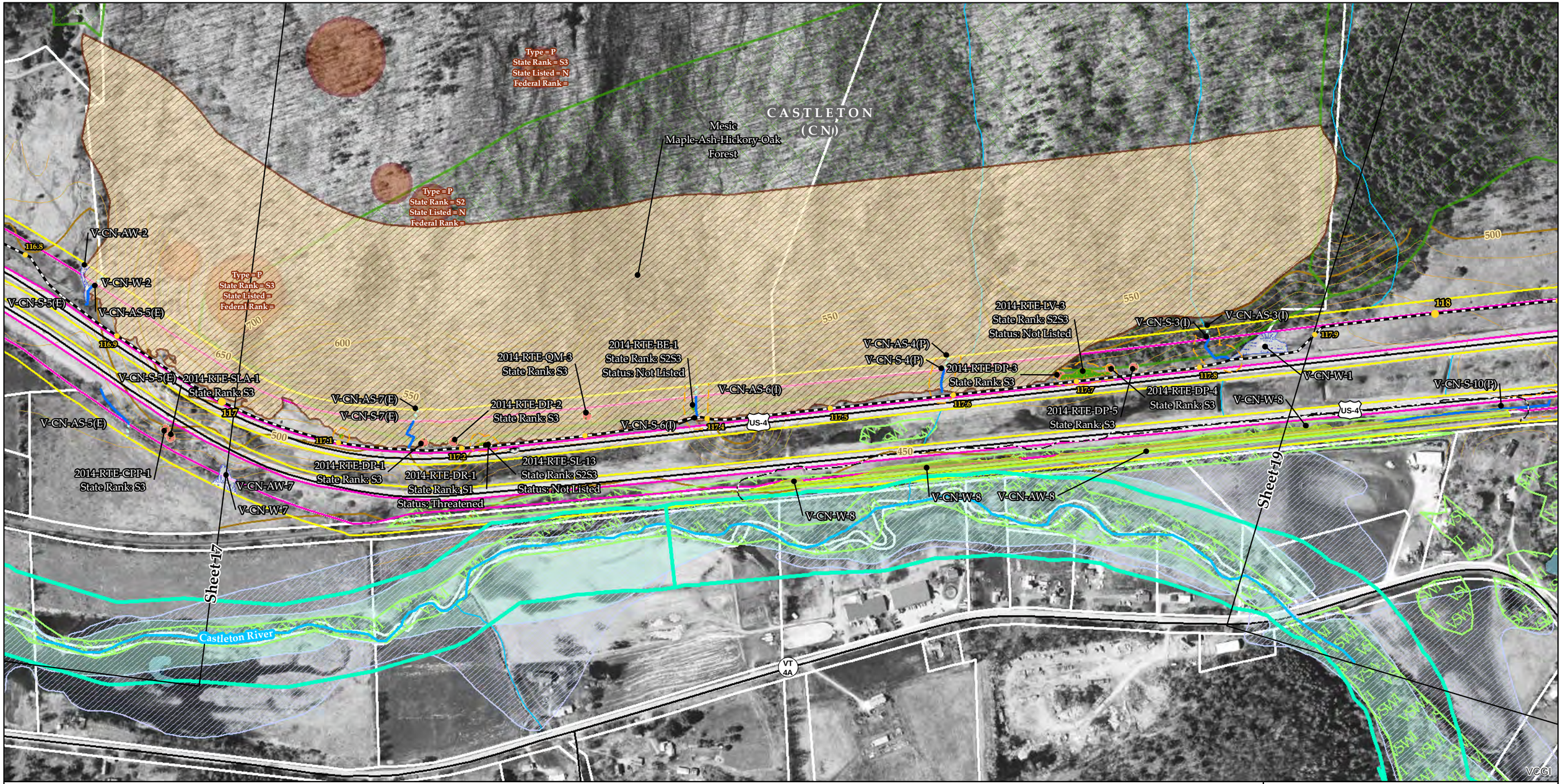
Sheet Number 17 of 51

November 6, 2014

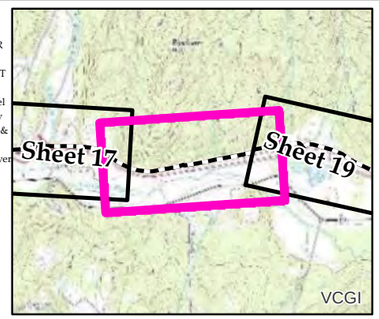
N

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

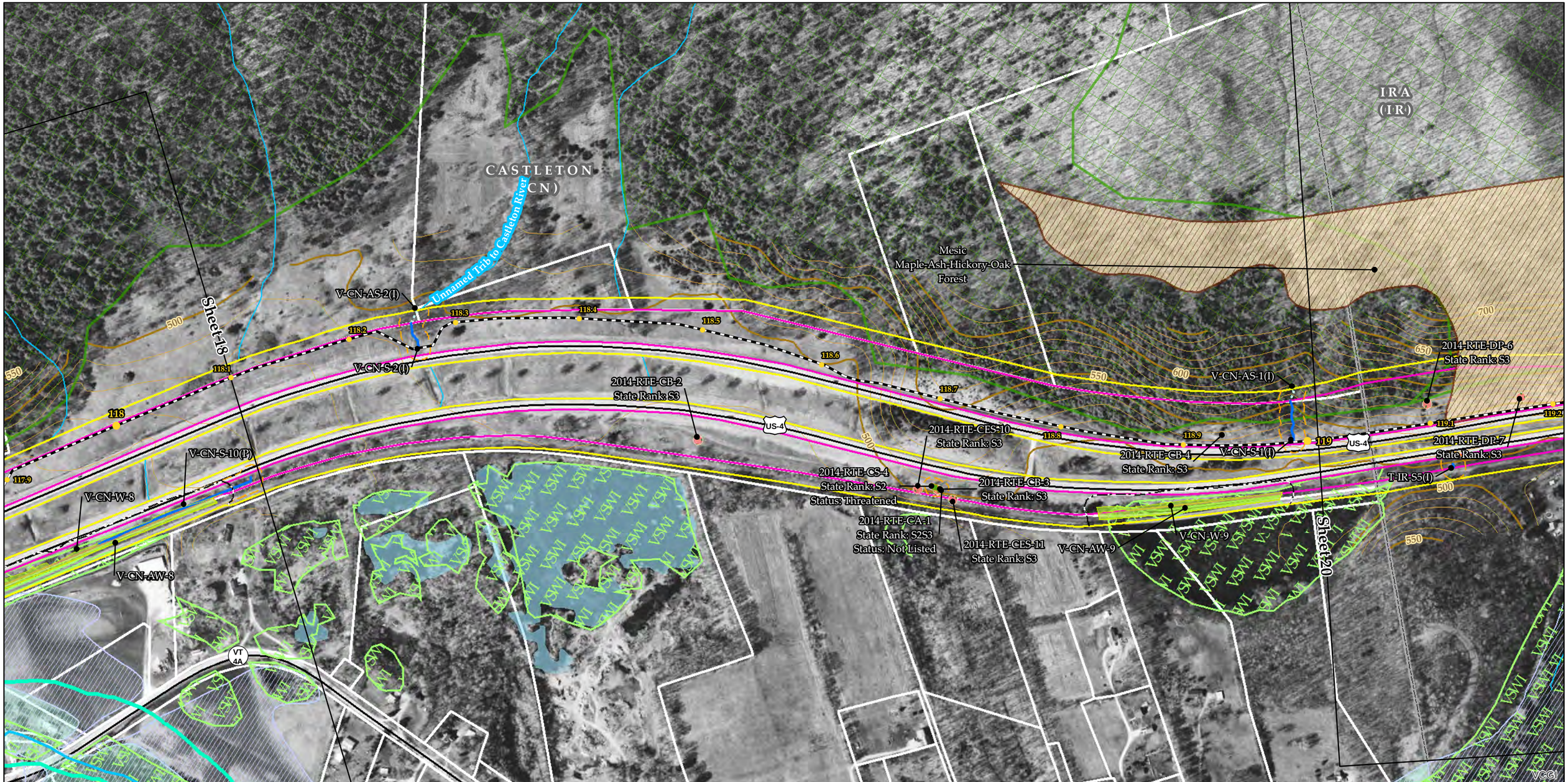
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 18 of 51

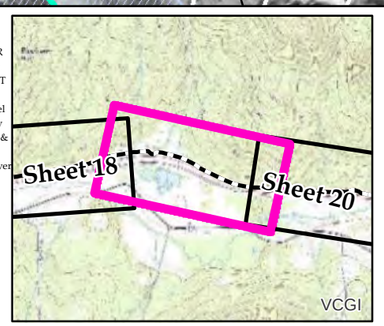
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

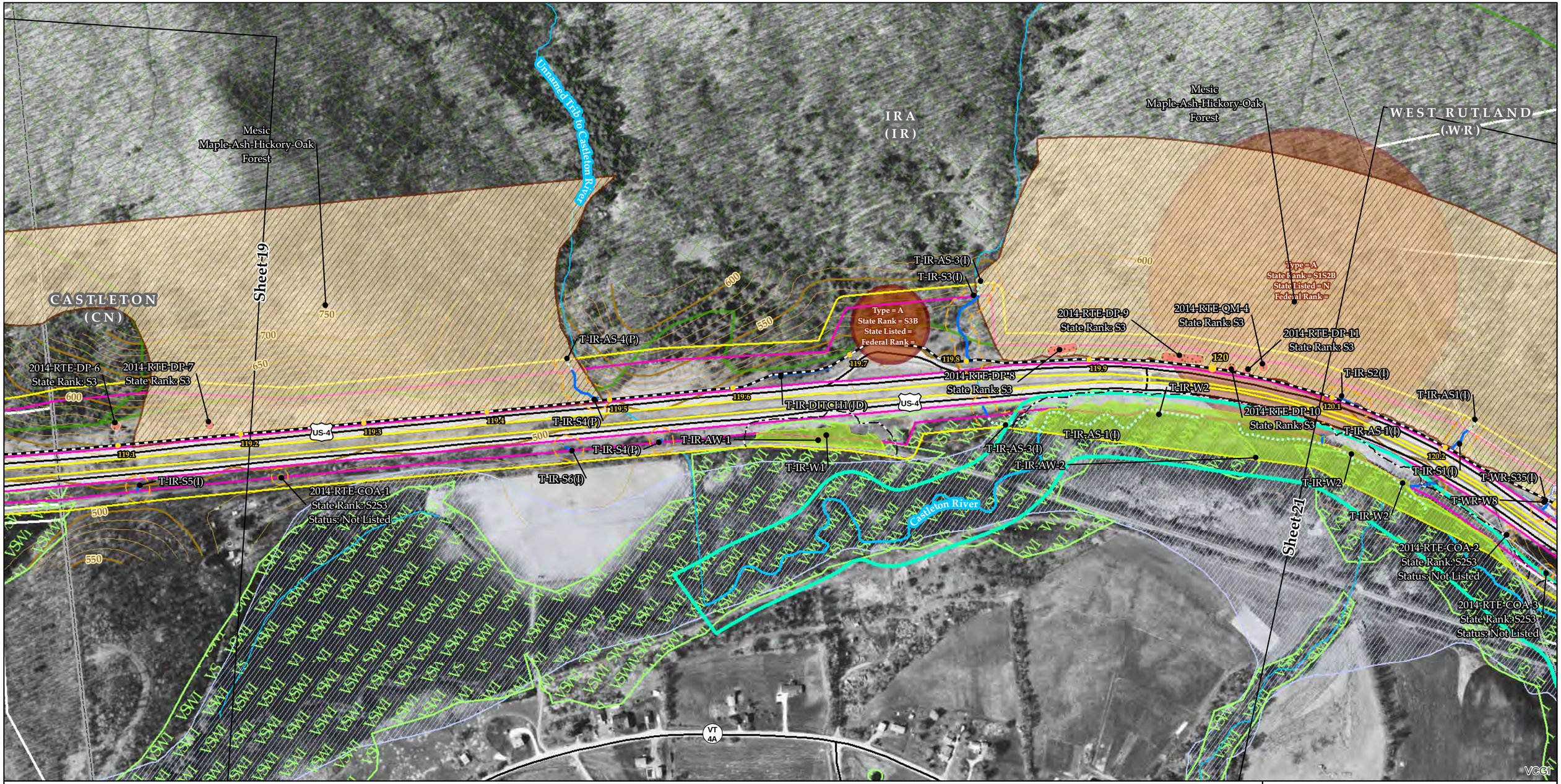
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 19 of 51

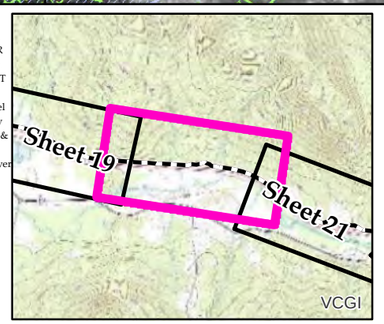
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

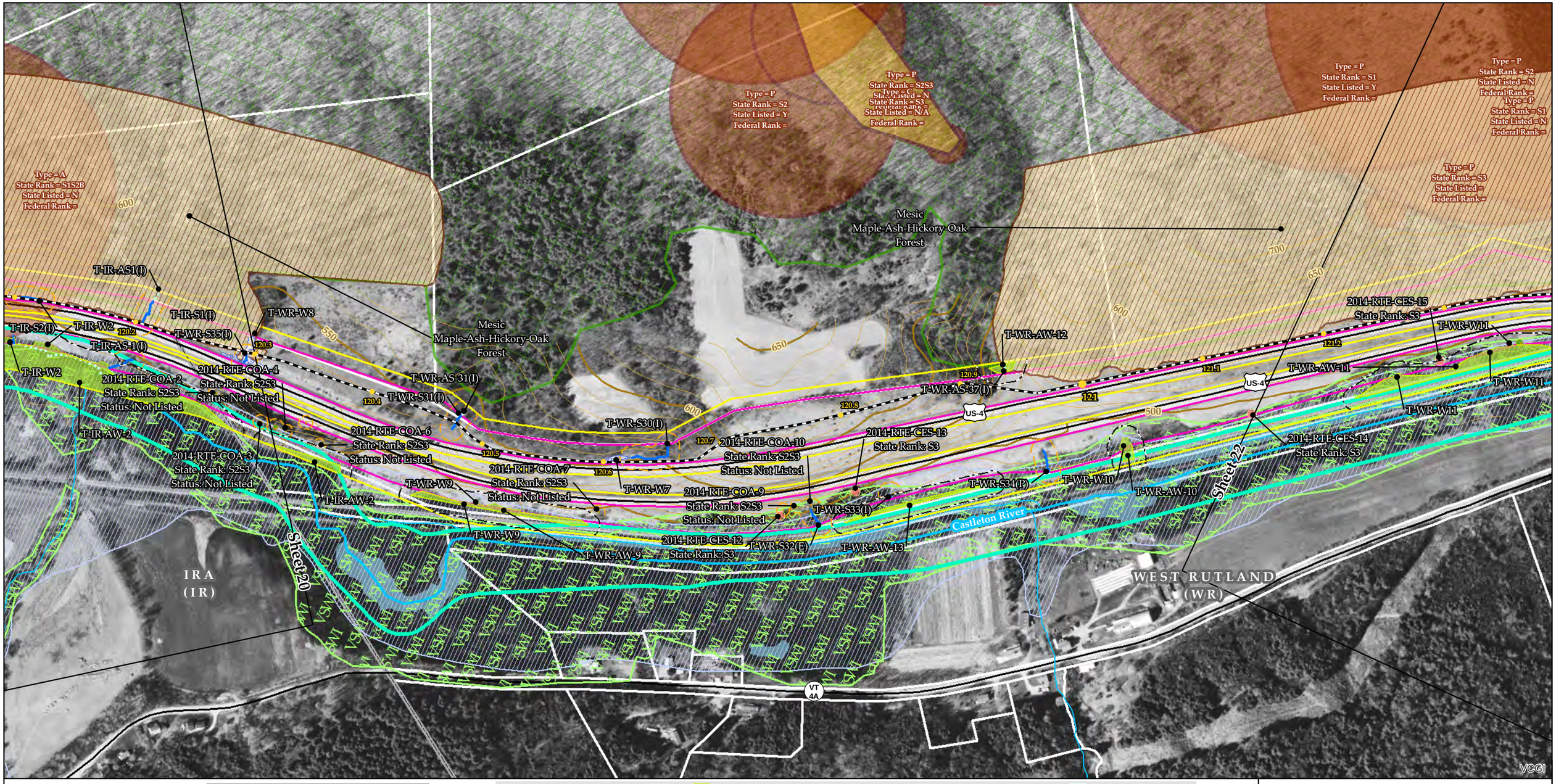
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 20 of 51

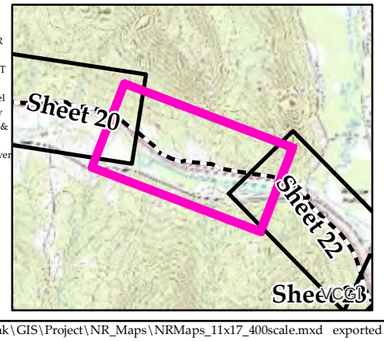
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

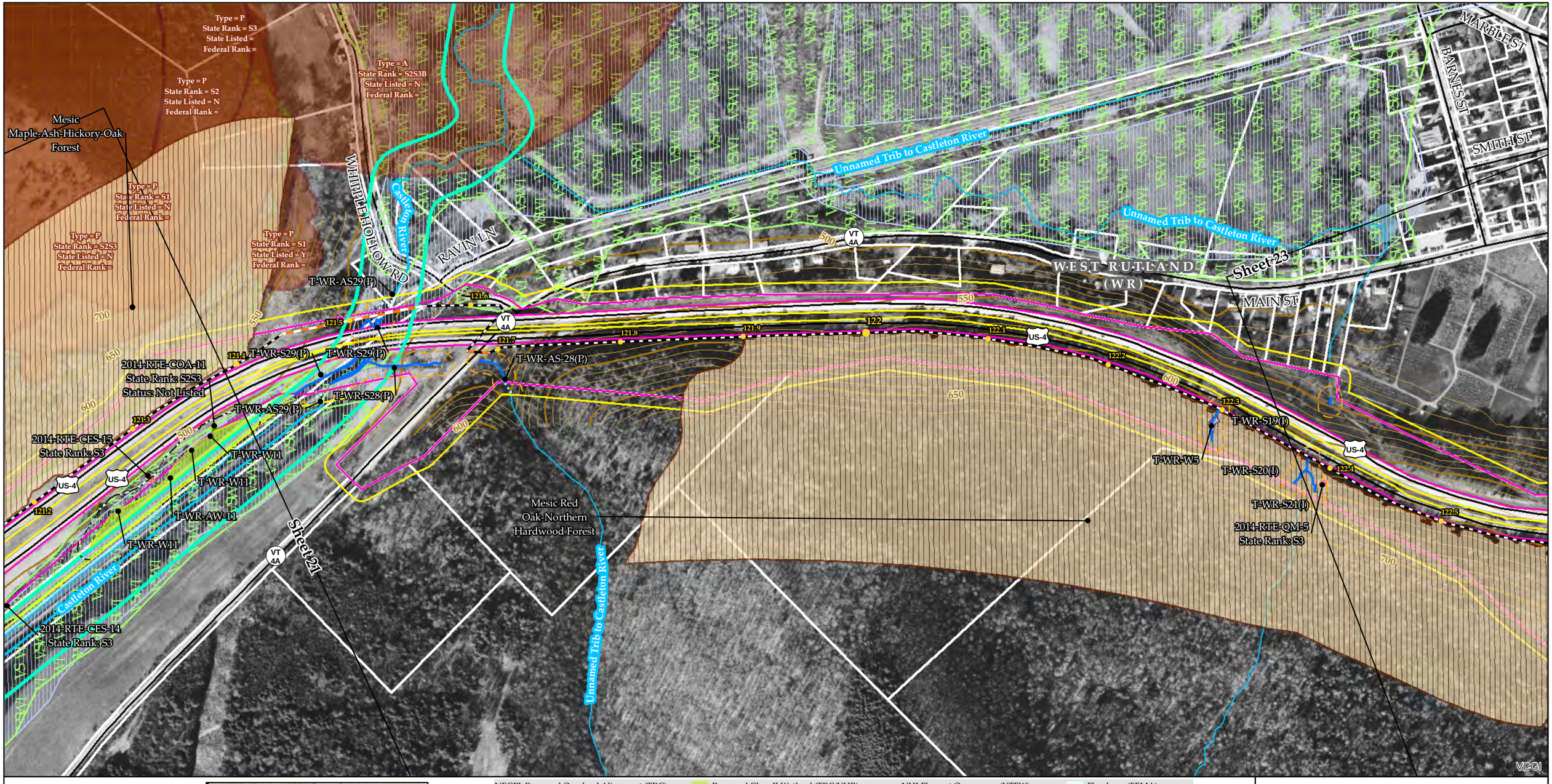
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 21 of 51

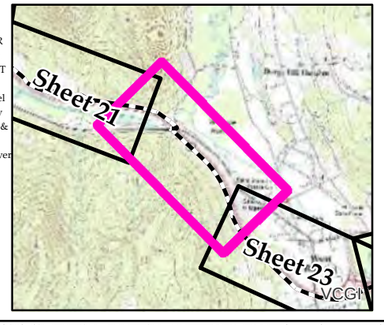
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

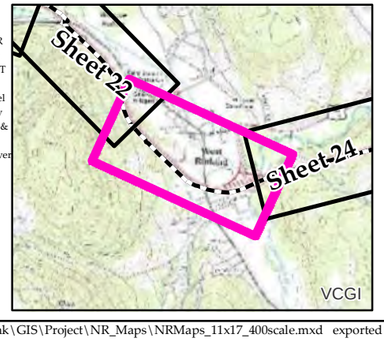
Sheet Number 22 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 23 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

WEST RUTLAND (WR)

RUTLAND (RU)

Clarendon River

OLD BOARDMAN HILL RD

MCNEIL LN

BOARDMAN HILL RD

Sheet 23

Sheet 25

T-WR-AS-36(P)

T-WR-S36(P)

T-WR-DITCH5(JD)

T-WR-AS-11(I)

T-WR-AS-16( )

T-WR-AS-15(E)

T-WR-S16(E)

2014-RTE-TB-8
State Rank: S1
Status: Not Listed

T-WR-S15(E)

T-WR-AS-5(I)

T-WR-AS-4(I)

T-WR-AS-3(I)

T-WR-S4(I)

T-WR-DITCH2(JD)

T-WR-S6(I)

T-WR-S7(I)

T-WR-S5(I)

T-WR-S8(E)

T-WR-S11(I)

T-WR-S12(I)

T-WR-S13(E)

T-WR-S14(I)

T-WR-AS-14(I)

T-WR-W2

T-WR-AW-2

2014-RTE-TB-6
State Rank: S1
Status: Not Listed

T-WR-S36(P)

Type = P
State Rank = SH
State Listed = N
Federal Rank =

T-RU-AS-7(I)

T-RU-S5(I)

T-RU-S7(I)

T-RU-S10(E)

T-RU-S6(E)

T-RU-S8(E)

US-4

123.7 123.9 124 124.1 124.2 124.3 124.4 124.5 124.6 124.7 124.8

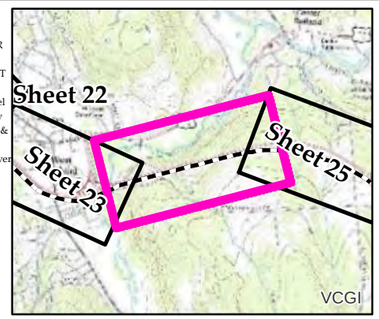
500 550 600 650 700 750

VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 24 of 51

November 6, 2014

N

400 200 0 400

Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

Unnamed Trib to Clarendon River

RUTLAND (RU)

WEST RUTLAND (WR)

RUTLAND CITY (RC)

TRAVIS TERR

QUARTERLINE RD

PARKERS RUN

DORR DR

CAMPBELL RD

SADI PL

BELOCK DR

BOARDMAN HILL RD

Sheet 24

Sheet 26

T-RU-AS-12(I)

T-WR-W1

T-WR-AW-1

T-RU-AS-11(I)

T-WR-DITCH1(JD)

T-RU-W8

T-RU-DITCH4(JD)

T-WR-S1(I)

T-RU-AS-7(I)

T-RU-AW-8

T-RU-S5(I)

T-RU-S7(I)

2014-RTE-TB-7
State Rank: S1
Status: Not Listed

T-RU-S6(E)

T-RU-S8(E)

Type = P
State Rank = SH
State Listed = N
Federal Rank =

T-RU-S10(E)

T-RU-S4(I)

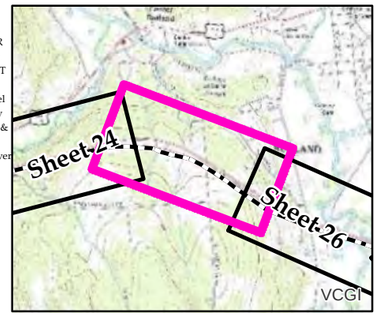
2014-RTE-LL-2
State Rank: S3

700 750 800 125 124.7 124.8 124.9 125.1 125.2 125.3 125.4 125.5 125.6 125.7 125.8 125.9

US-4

VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 25 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

RUTLAND CITY (RC)

RUTLAND (RU)

CAMPBELL RD

WOODLAND PL

DORR DR

PARK ST

TH 85

CREEK RD

Otter Creek

Type = A
State Rank = S2
State Listed = N
Federal Rank =

Type = P
State Rank = S3
State Listed =
Federal Rank =

T-RU-AS-2(P)
T-RU-AS-3(I)
T-RU-S2(P)
T-RU-W5
T-RU-AW-5
T-RU-AW-2
T-RU-W2
T-RU-AS-2(JD)
T-RU-S3(I)
T-RU-AS-2(P)
T-RU-DITCH2(JD)
T-RU-W3
T-RU-W6
T-RU-AW-6
T-RU-W7
T-RU-AW-7
T-RU-AW-3
T-RU-AW-4
T-RU-W4
T-RU-S4(I)
2014-RTE-LL-2
State Rank: S3

US-4

Sheet 25

Sheet 27

Sheet 28

VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC Results you can rely on

NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

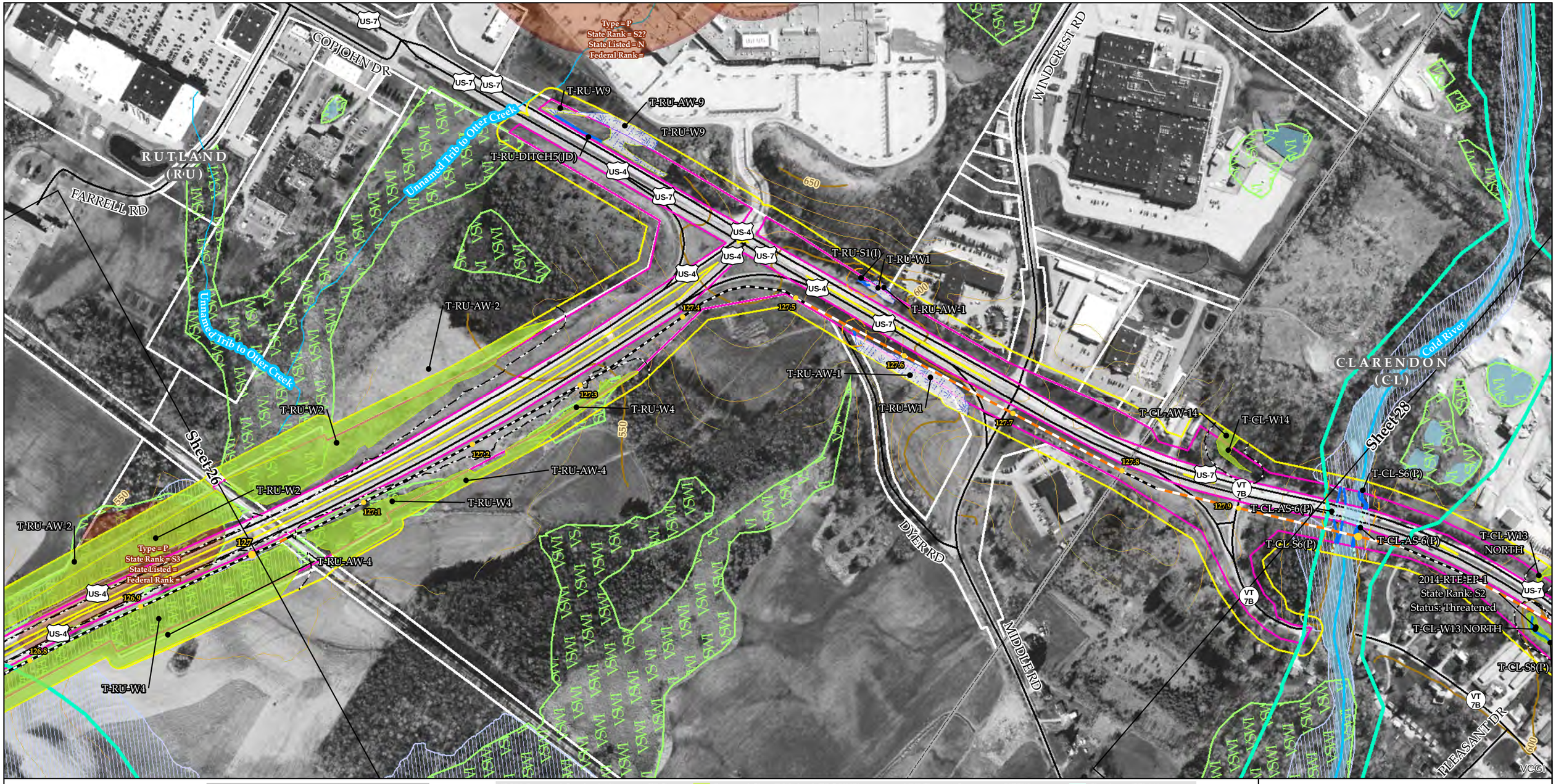
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 26 of 51

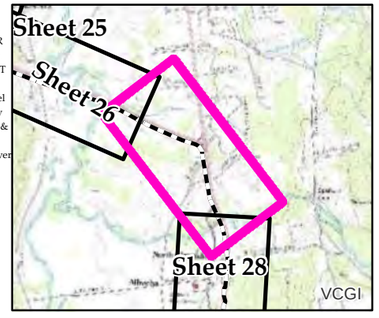
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 27 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

CLARENDON
(CL)

N SHREWSBURY RD

PLEASANT DR

PLEASANT DR EXT

MOULTON AV

GRANGE HALL RD

MIDDLE RD

FIRE LN 3

FIRE LN 3A

FIRE LN 3B

Sheet 27

Sheet 29

Unnamed Trib to Otter Creek

Cold River

2014-RTE-EP-2
State Rank: S2
Status: Threatened

2014-RTE-EP-1
State Rank: S2
Status: Threatened

T-CL-W13 NORTH
T-CL-AW-13
T-CL-S8(P)
T-CL-AS-6(P)
T-CL-S6(P)
T-CL-W13 SOUTH
T-CL-W12
T-CL-AW-12
T-CL-AW-11
T-CL-AS-S4(P)
T-CL-S4(P)
T-CL-W11
T-CL-S5(E)
T-CL-AS-4(P)
T-CL-DITCH5(JD)
T-CL-AS-5(JD)
T-CL-AS-5(E)
T-CL-AW-8
T-CL-W8
T-CL-AW-7
T-CL-W7
T-CL-AW-6
T-CL-W6
T-CL-W5
T-CL-AW-5

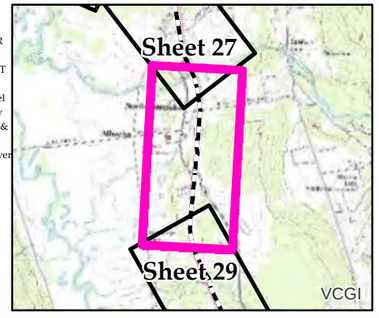
128.1
128.2
128.3
128.4
128.7
128.8
128.9
129
129.1
129.2

600
650

US-7
VT 7B

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb
TRC
Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

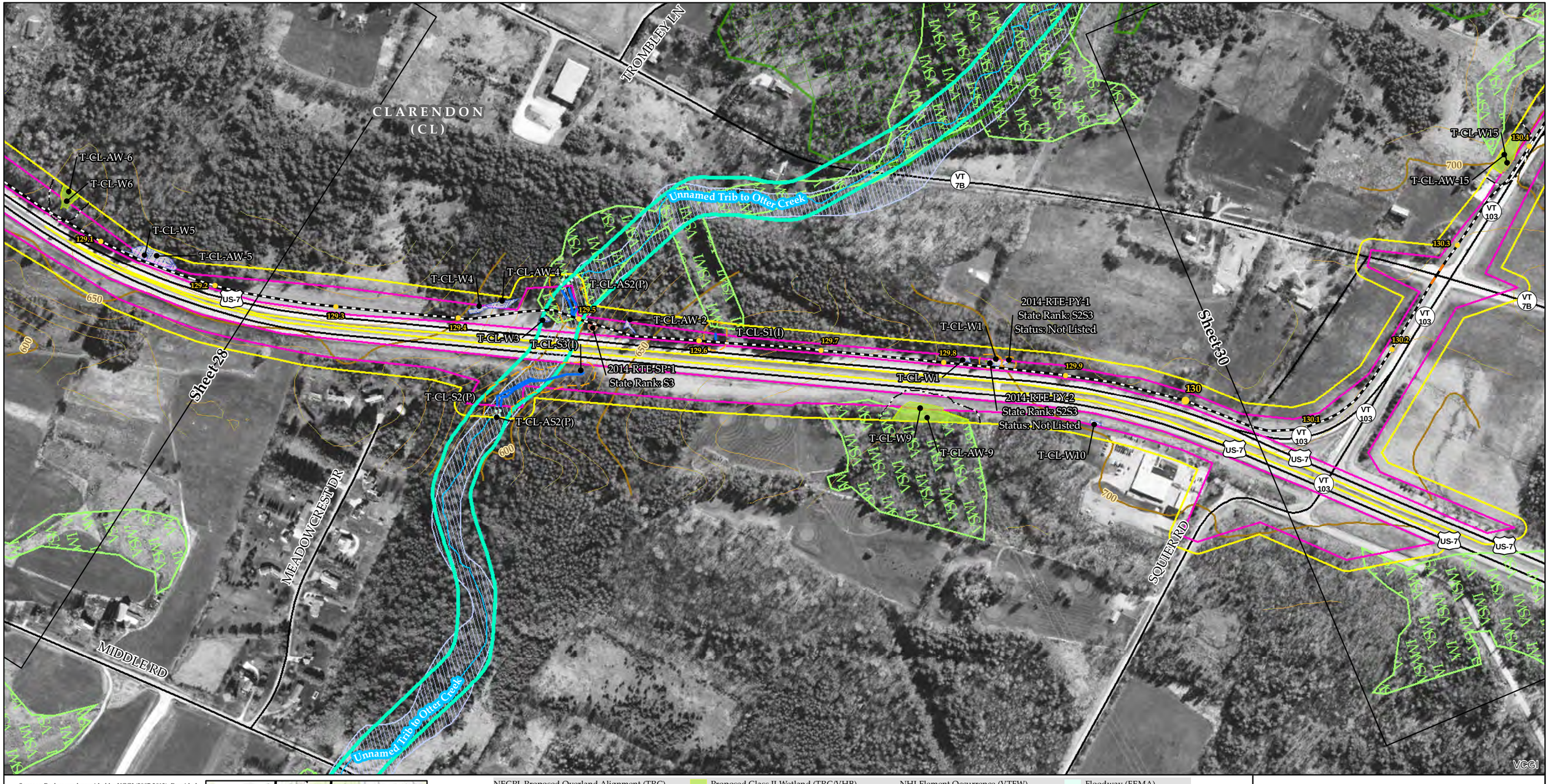
Sheet Number 28 of 51

November 6, 2014

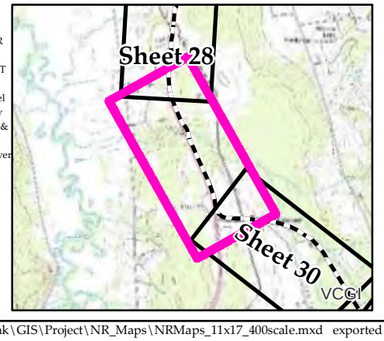
400 200 0 400

Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

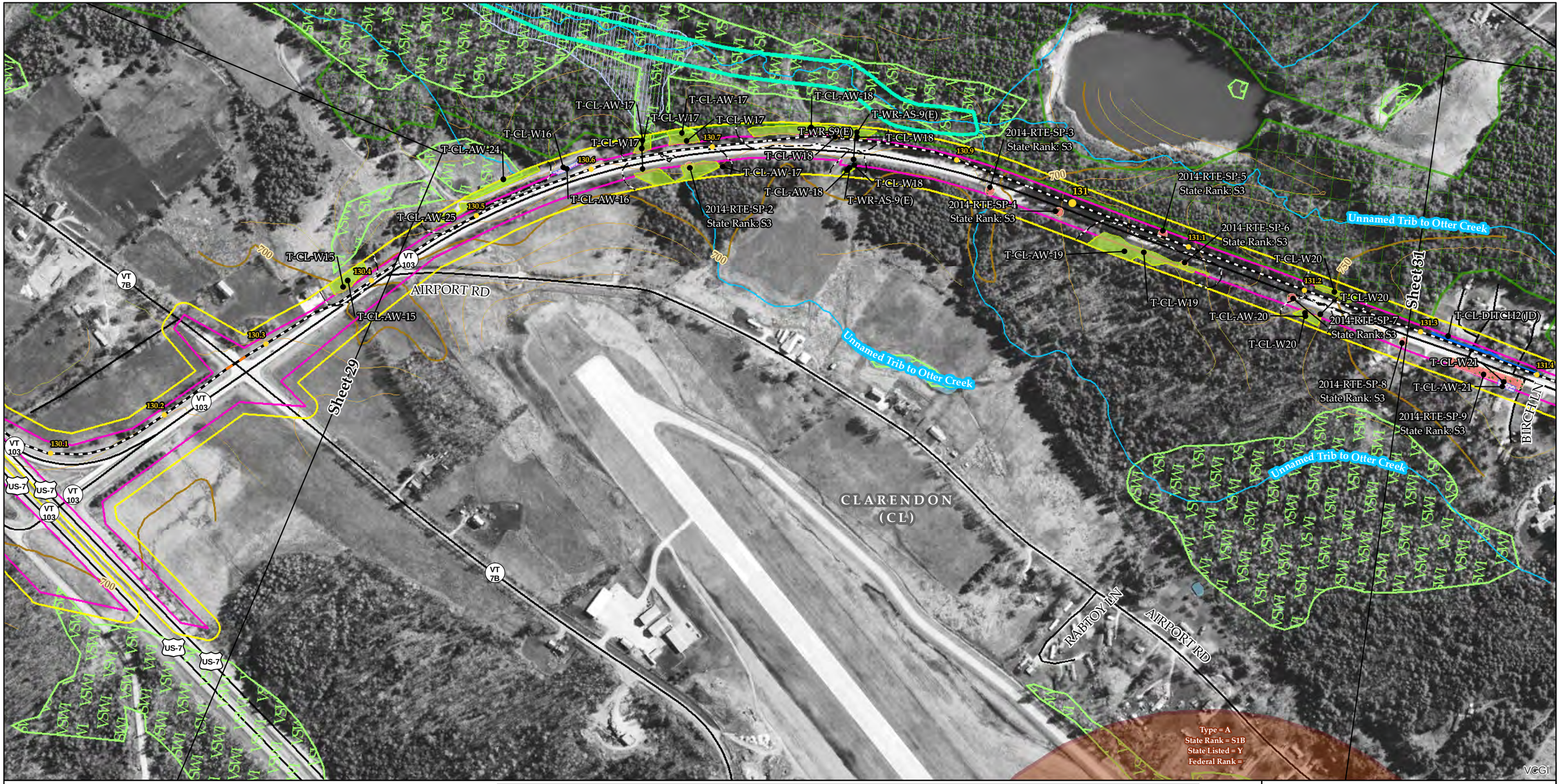
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 29 of 51

November 6, 2014

400 200 0 400 Feet

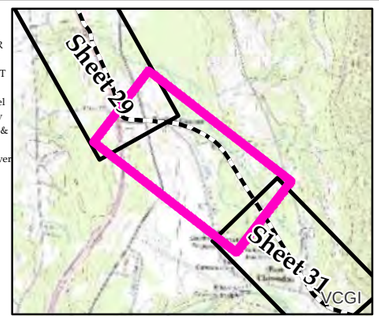
\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

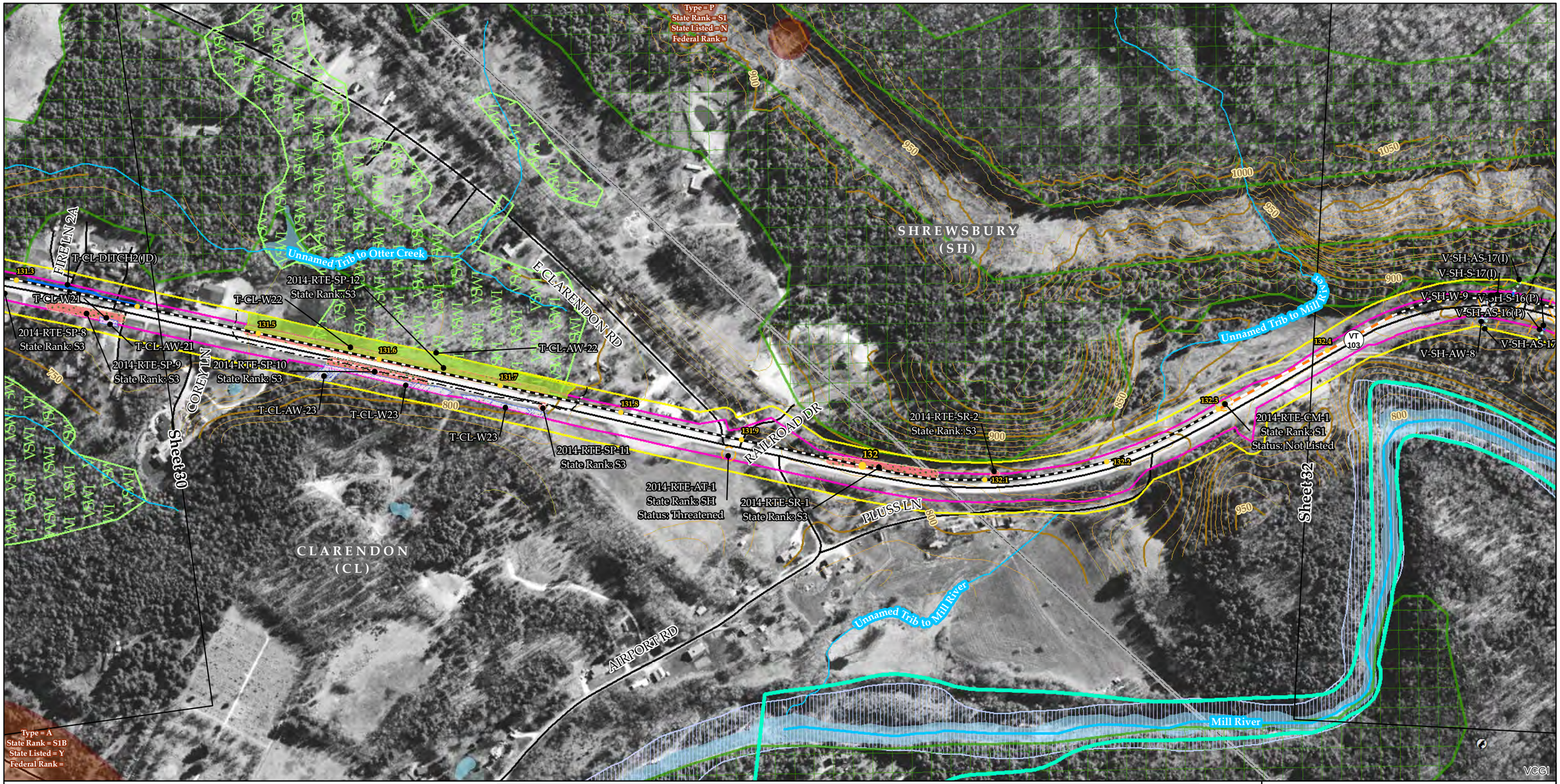
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 30 of 51

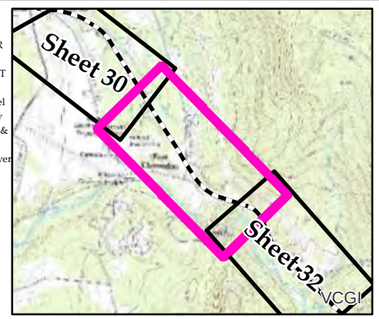
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

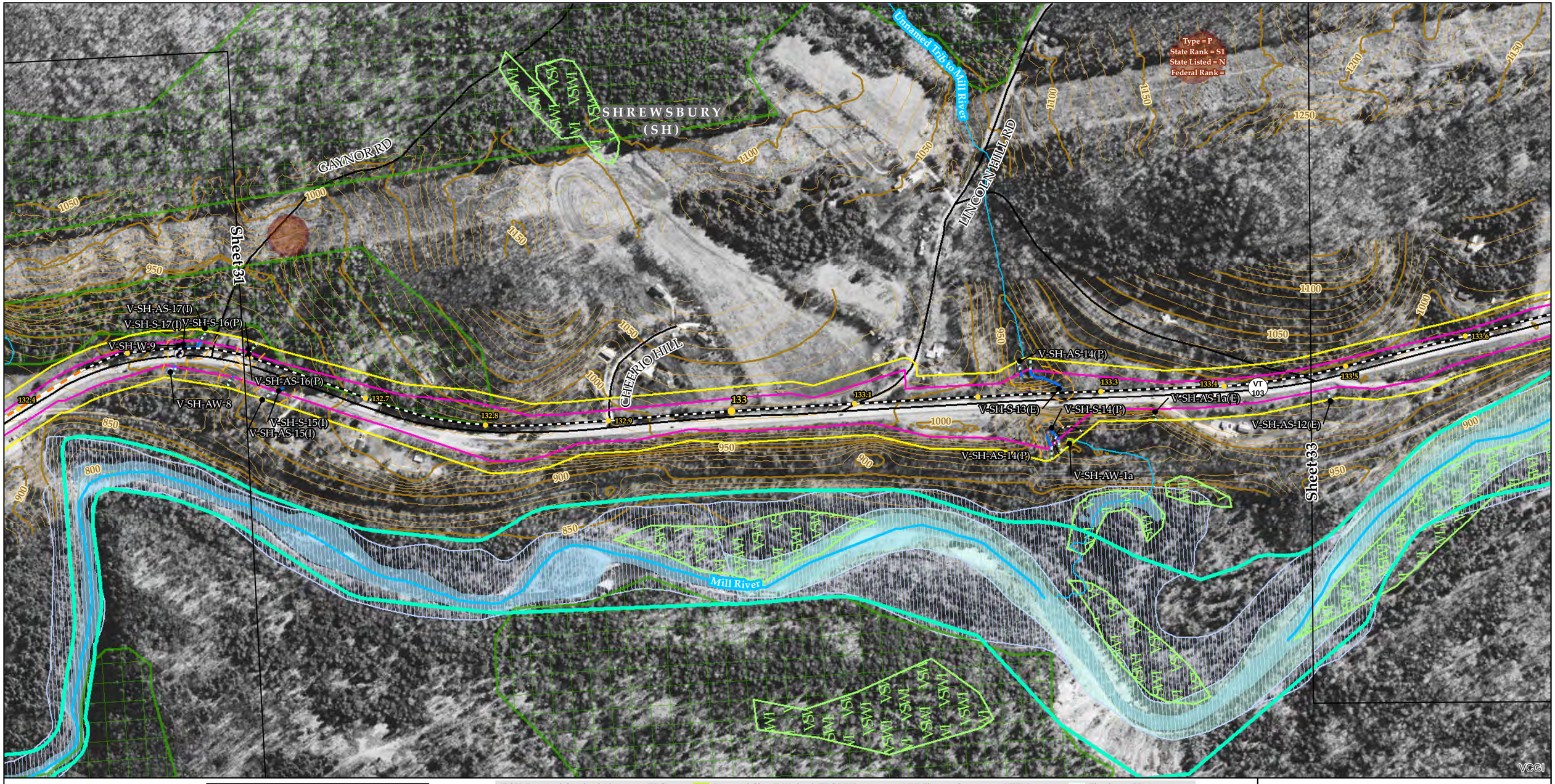
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 31 of 51

November 6, 2014

400 200 0 400 Feet

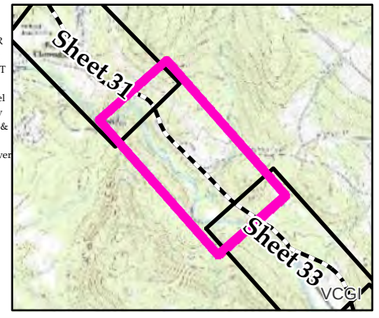
\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC
Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

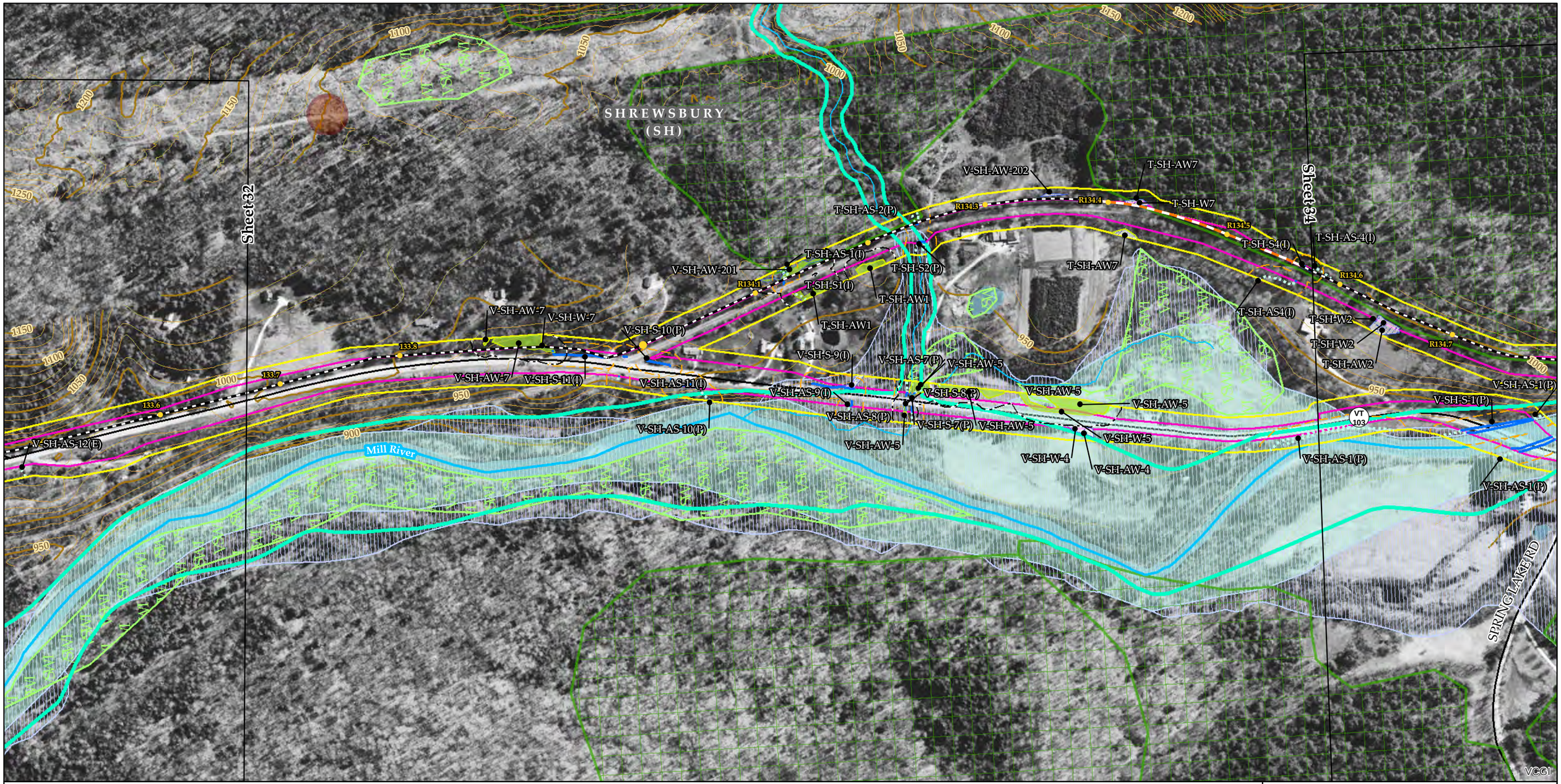
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 32 of 51

November 6, 2014

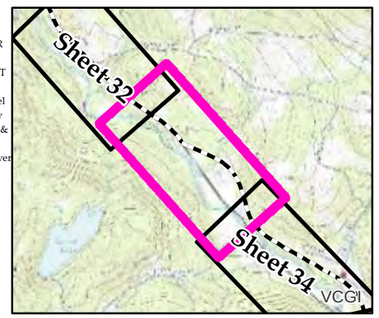
400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb
TRC
Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

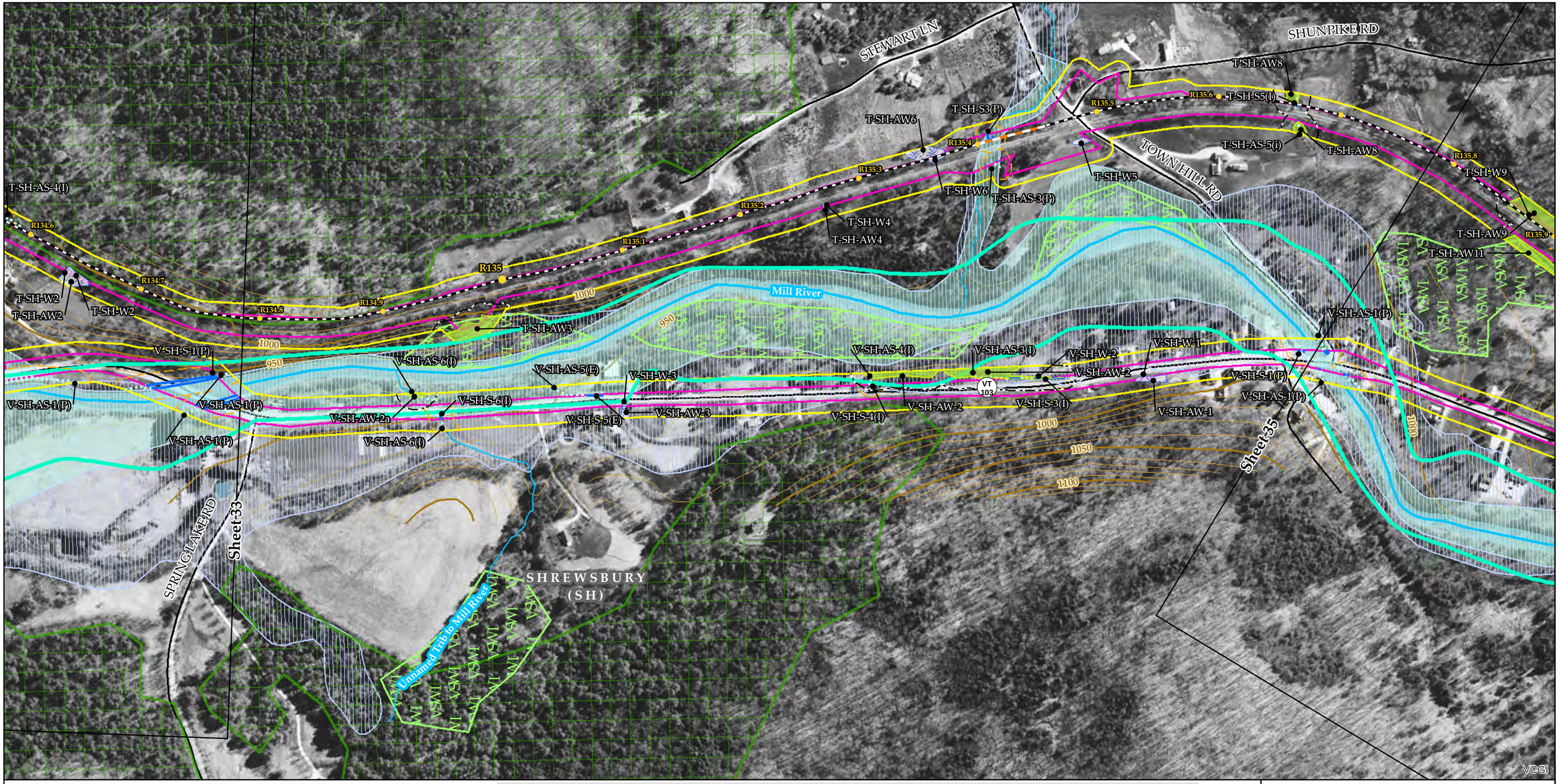
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 33 of 51

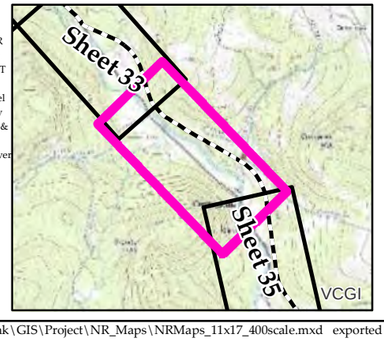
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

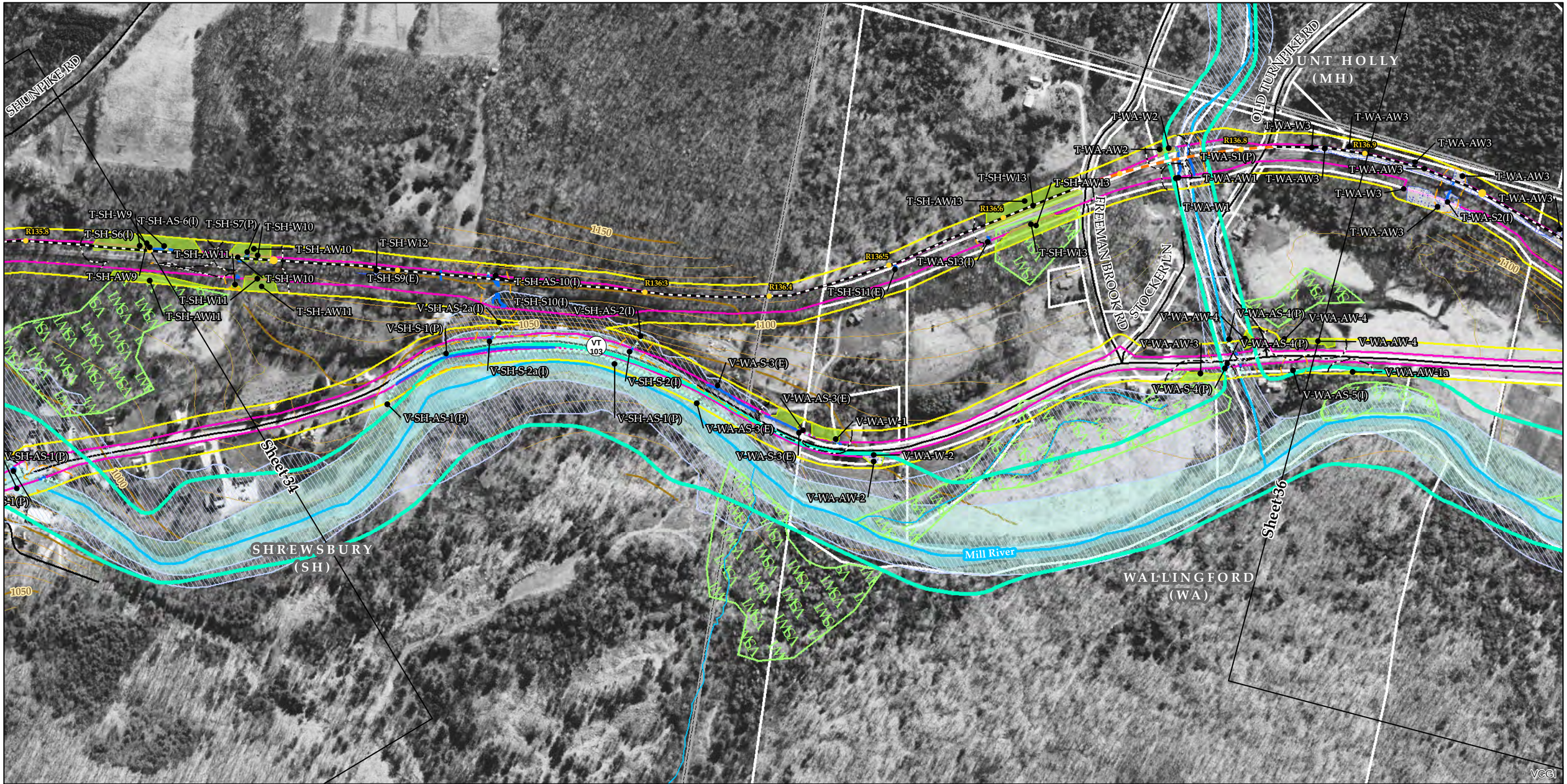
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 34 of 51

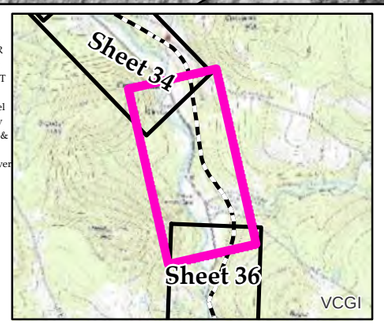
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

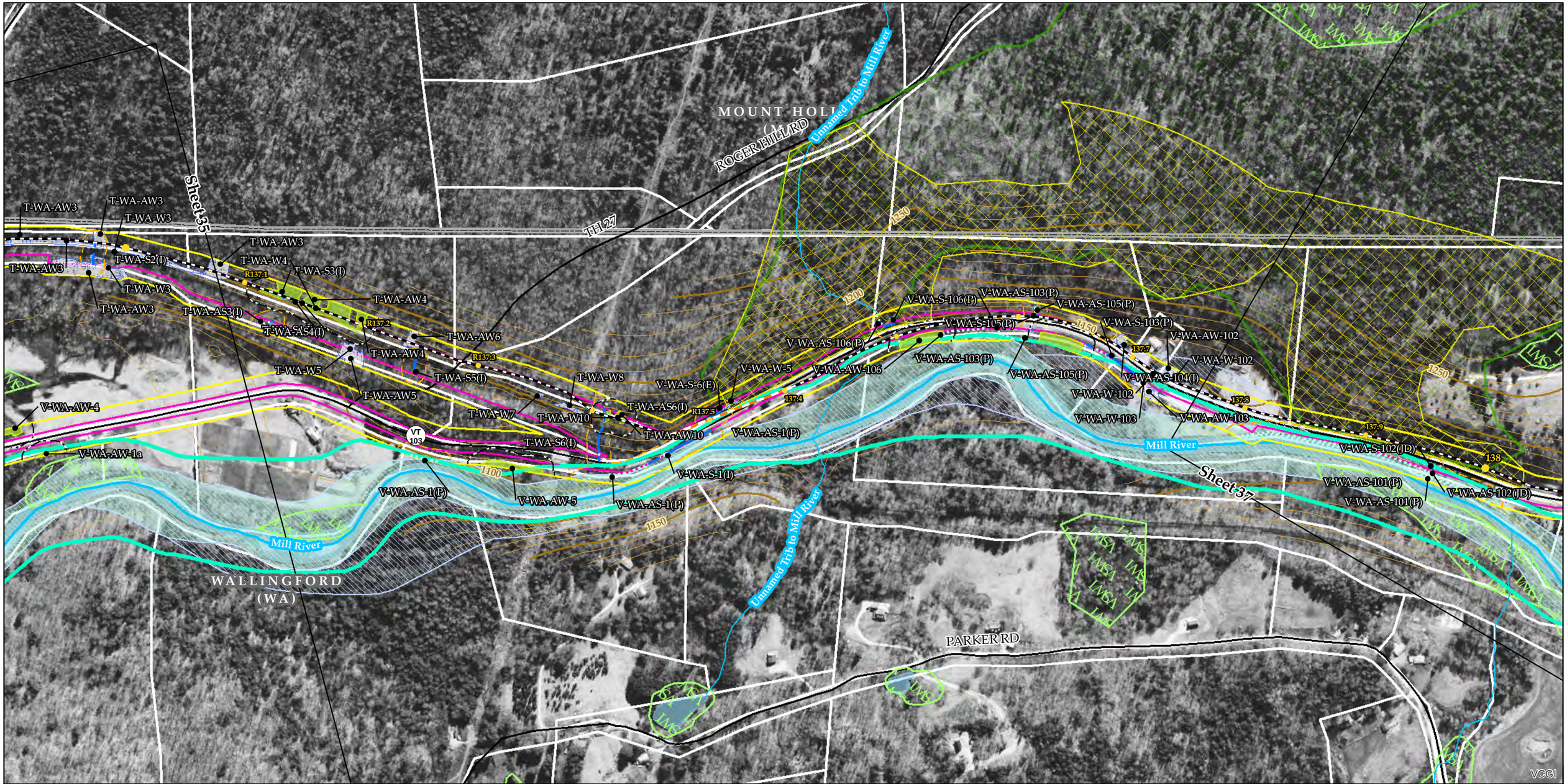
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 35 of 51

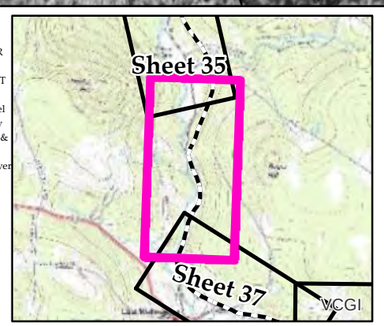
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

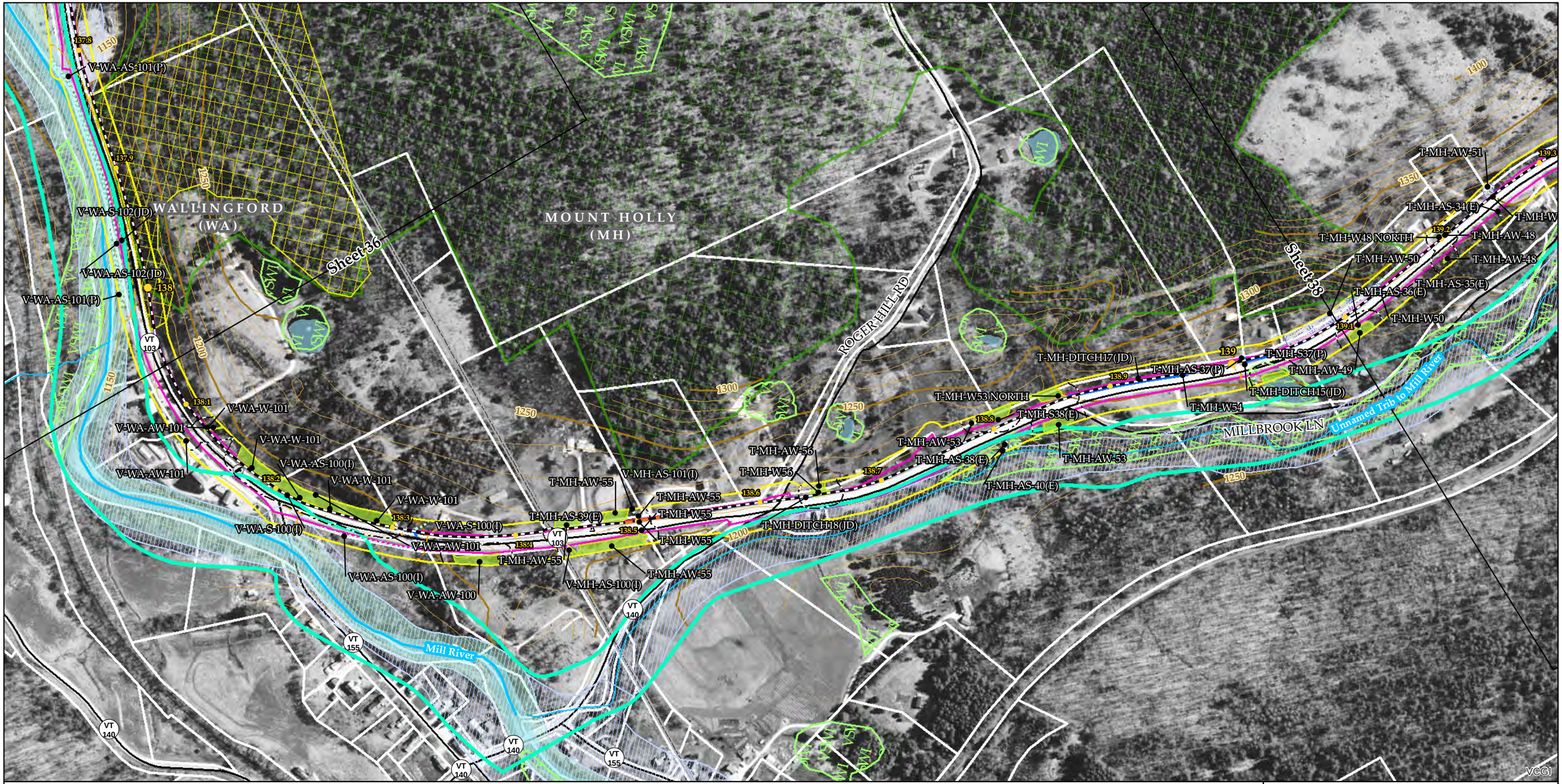
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 36 of 51

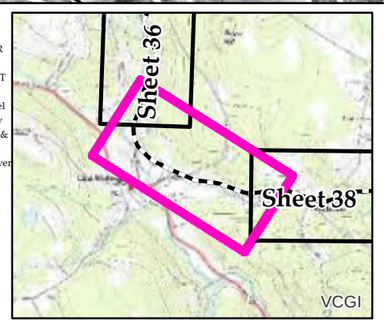
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

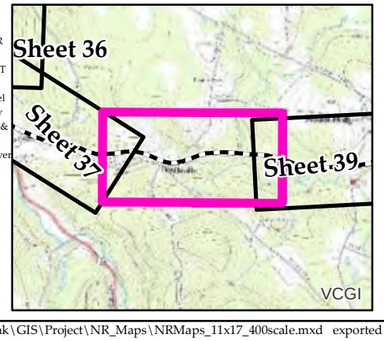
Sheet Number 37 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

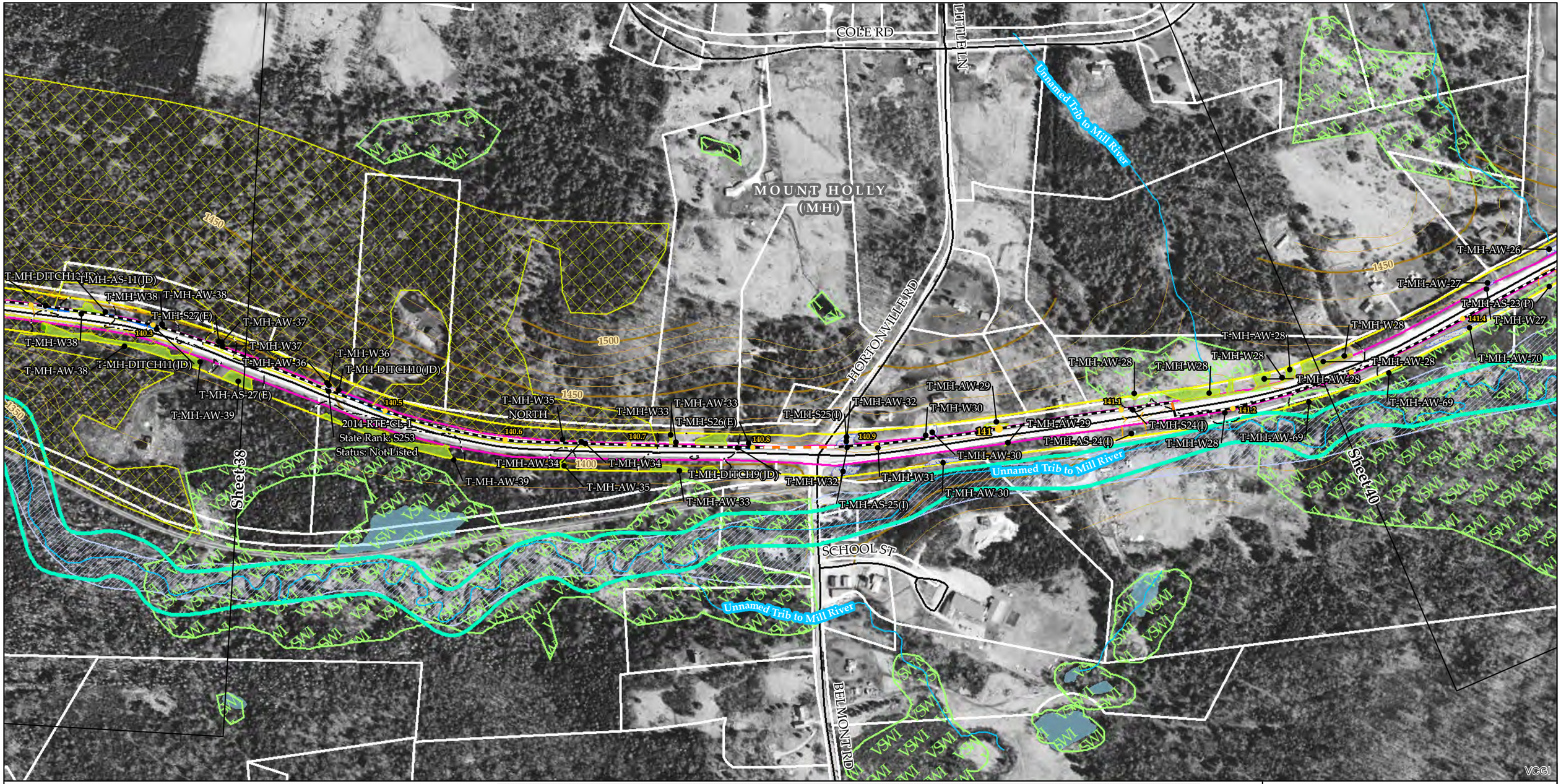
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 38 of 51

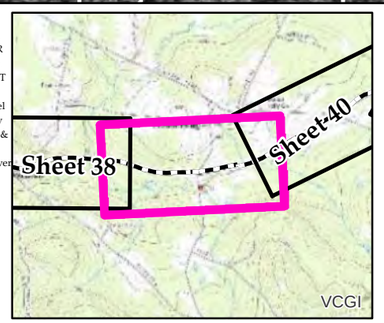
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

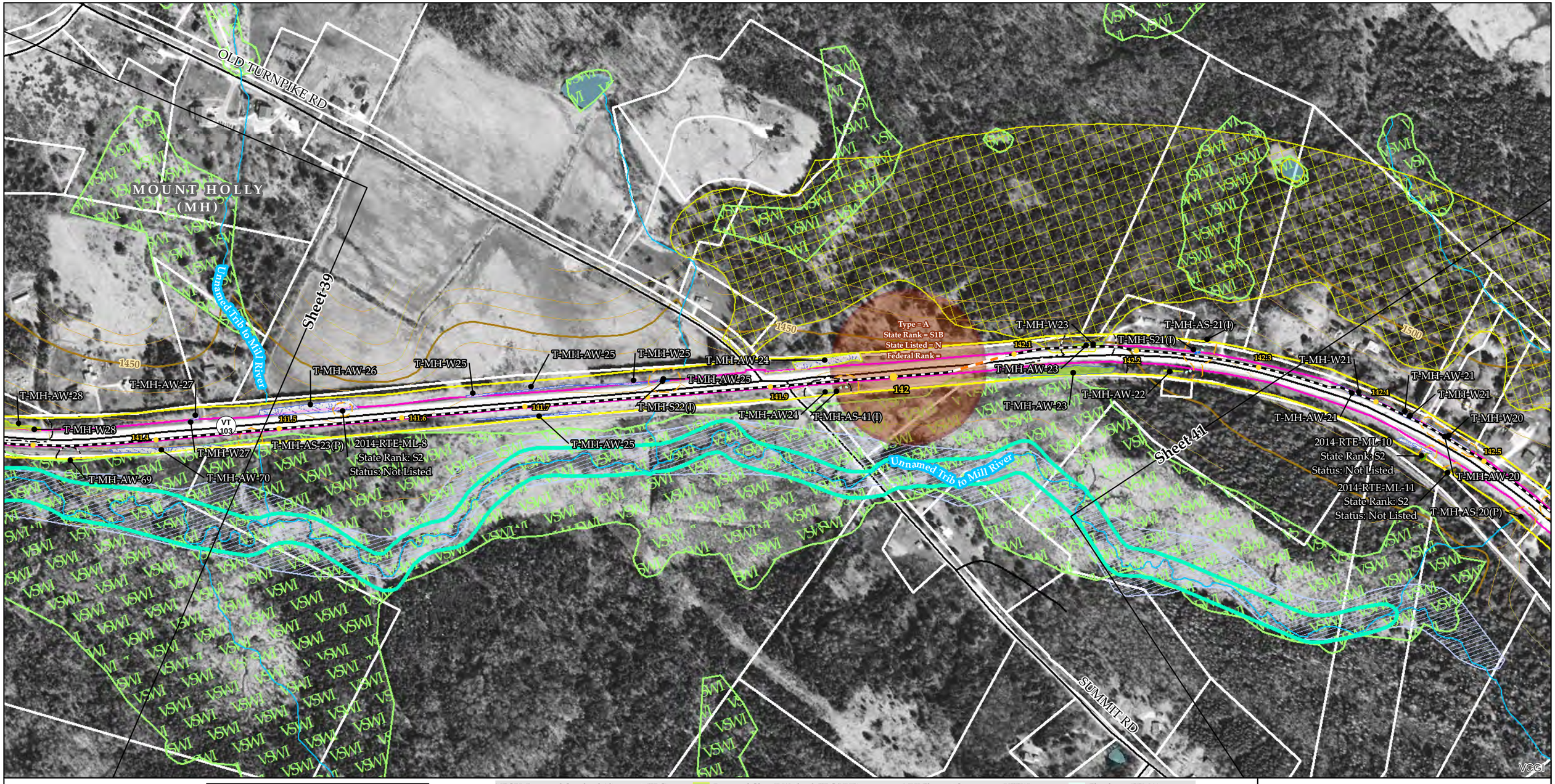
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 39 of 51

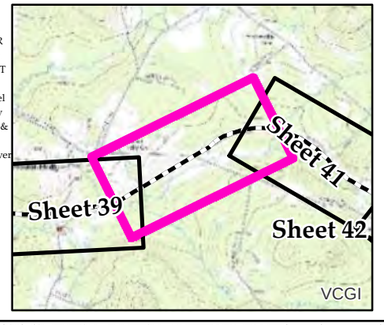
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

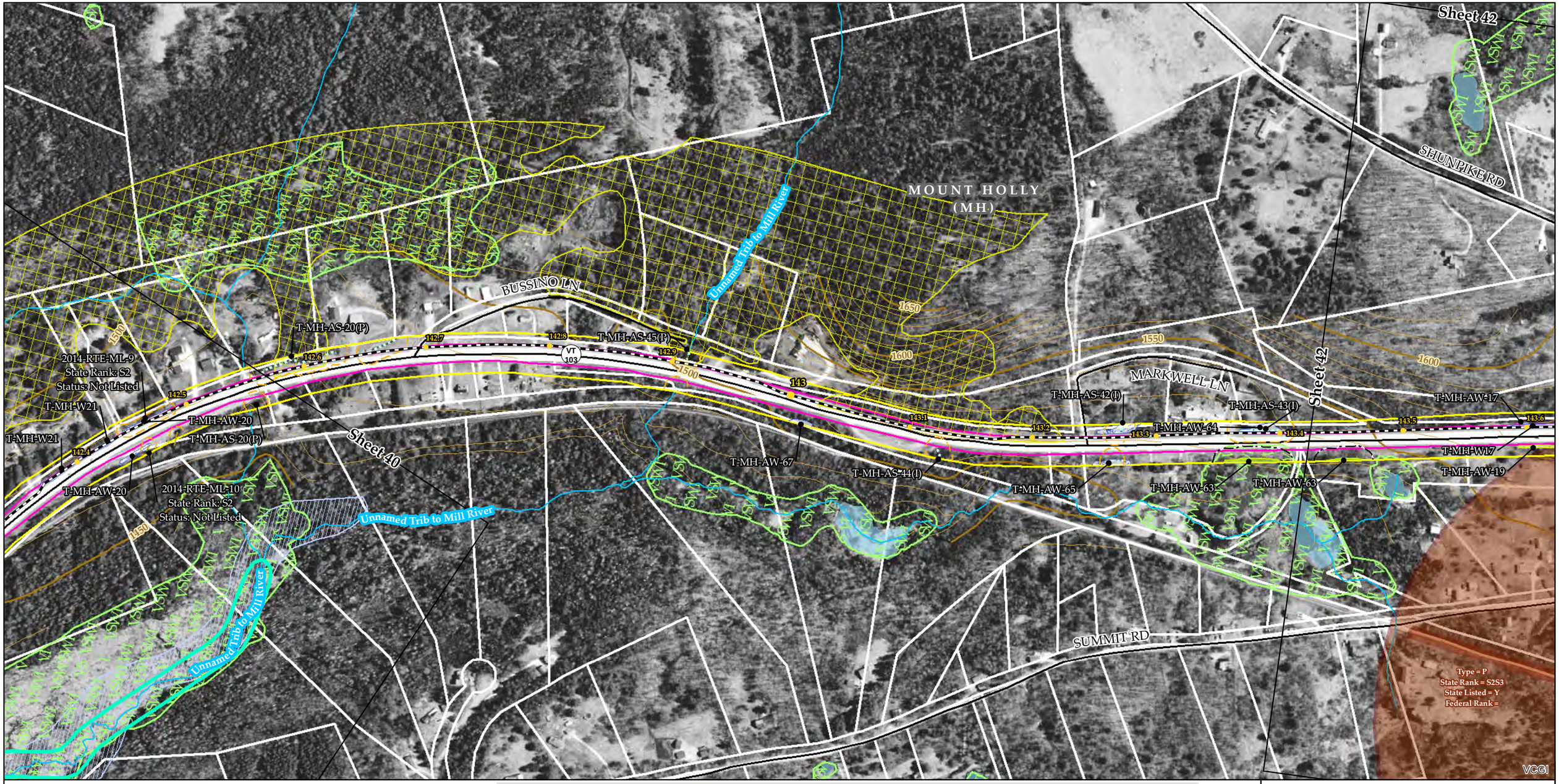
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 40 of 51

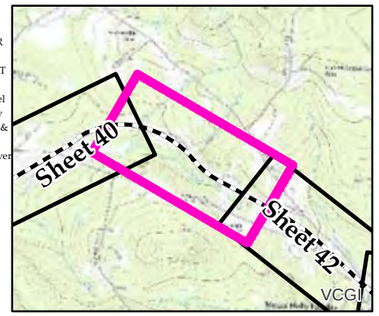
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (TRC/VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

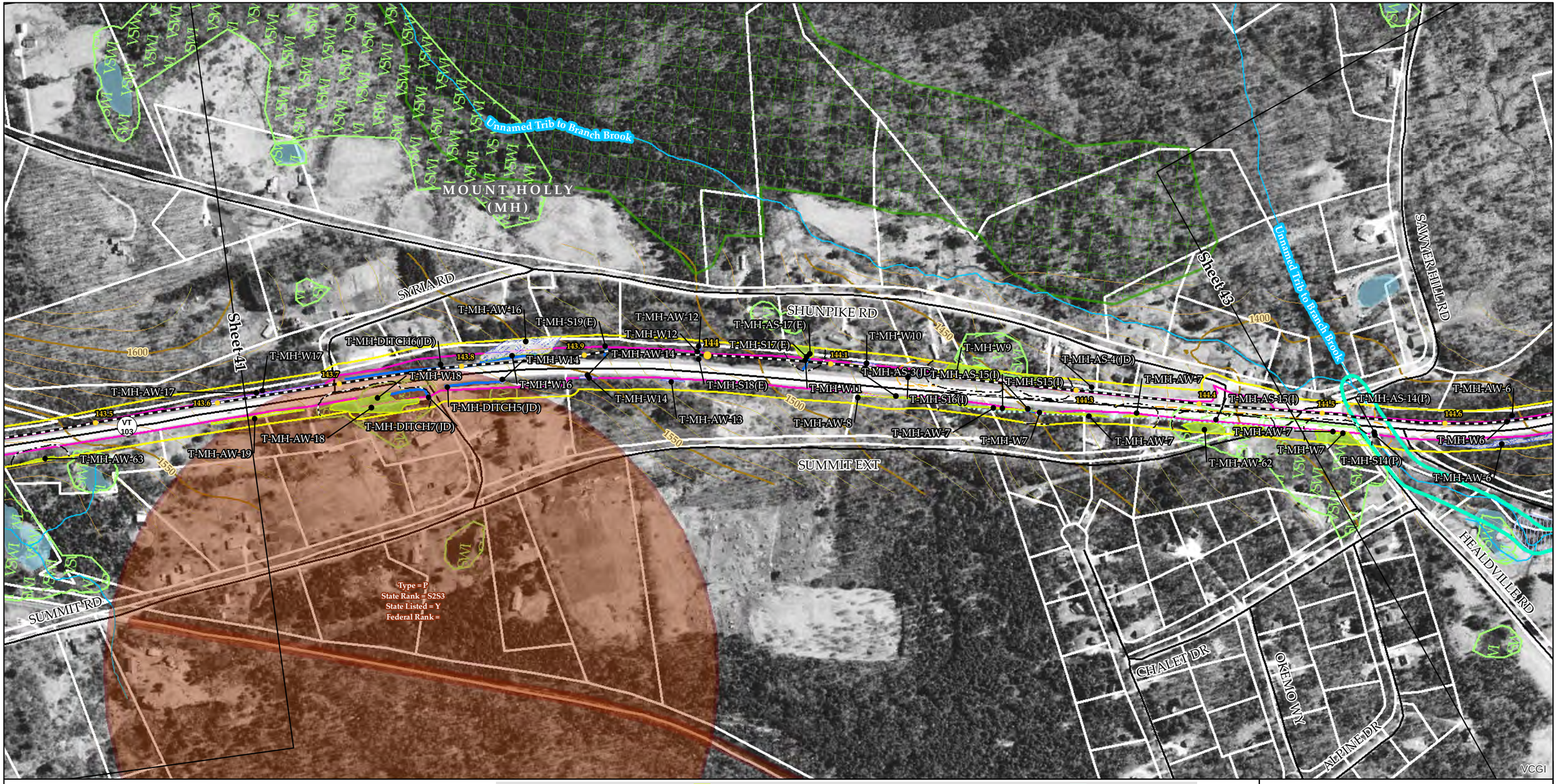
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 41 of 51

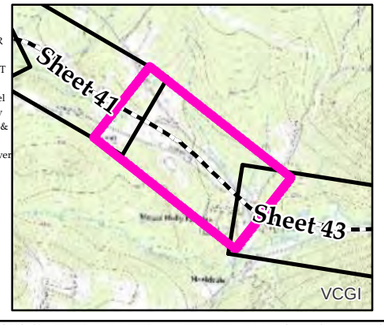
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

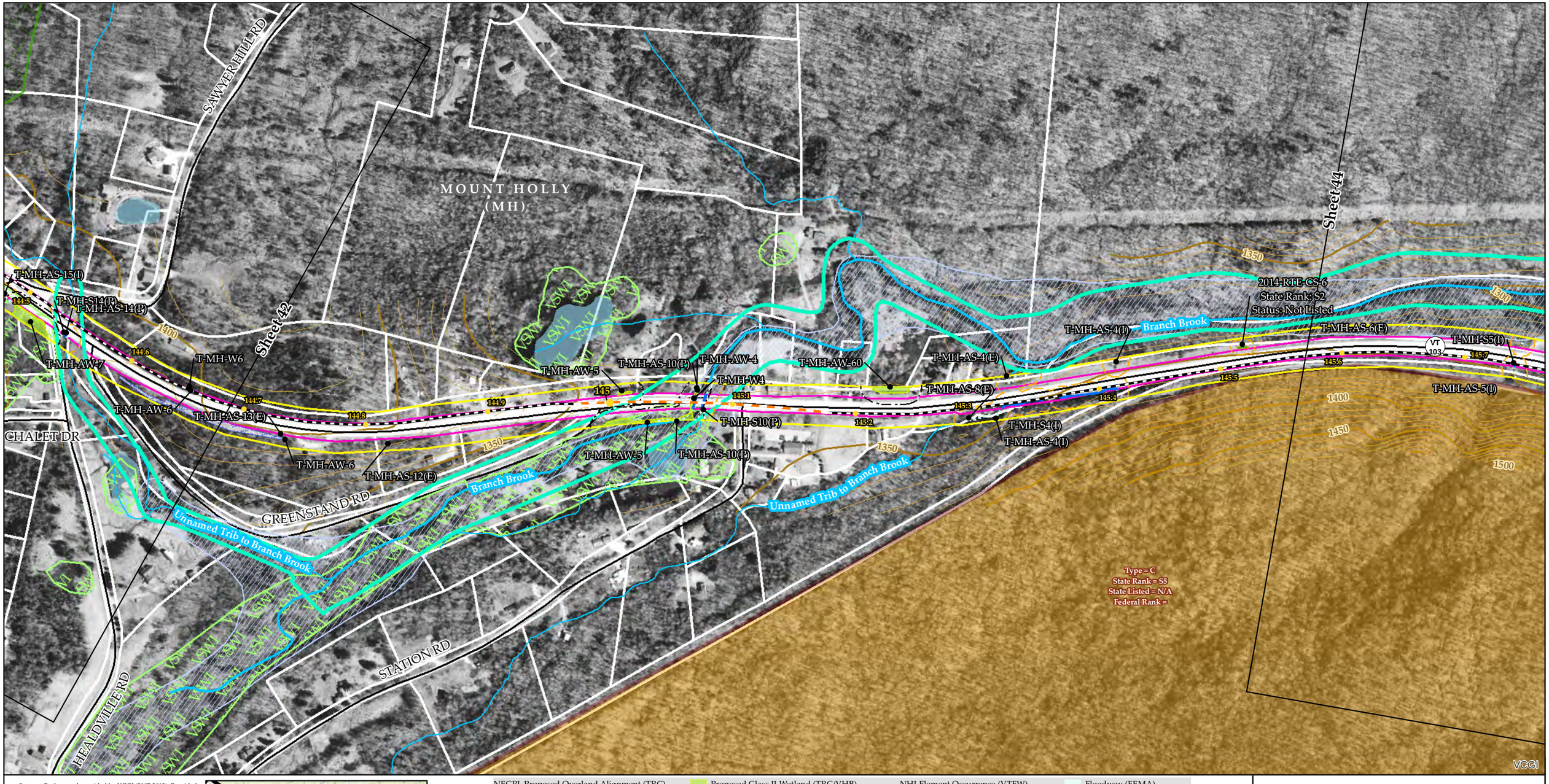
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 42 of 51

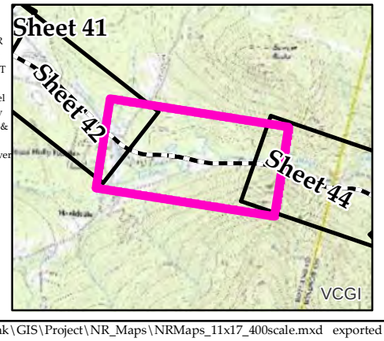
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 43 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

MOUNT HOLLY
(MH)

LUDLOW
(LU)

BUTTERMILK FALLS RD

Branch Brook

Sheet 43

Sheet 45

VT 103

T-MH-AW-1
T-MH-AS-6(E)
T-MH-AS-5(I)
T-MH-S3(E)
T-MH-S5(I)
T-MH-AS-3(E)
2014-RTE-JG-1
State Rank: S2
Status: Endangered
T-MH-AW-2
T-MH-S2(E)
2014-RTE-CP-1
State Rank: SU
Status: Not Listed
T-MH-DITCH1(JD)
T-MH-AS-2(E)
T-MH-AW-3
T-MH-S1(P)
T-MH-AW-57
T-MH-AS-1(P)
T-LU-AW-16
T-MH-AS-1(P)
T-LU-W16
2014-RTE-ML-12
State Rank: S2
Status: Not Listed
T-LU-AS32(I)
T-LU-S32(I)
T-LU-W14
T-LU-AS-34(I)
T-LU-S34(I)
T-LU-AS-34(P)
T-LU-S33(E)
T-LU-AS-35(I)
T-LU-S35(I)
T-LU-AS-37(E)
T-LU-S36(E)
T-LU-S38(E)
T-LU-S31(E)
T-LU-S37(E)
2014-RTE-ML-13
State Rank: S2
Status: Not Listed

Type = P
State Rank = S1
State Listed = N
Federal Rank =

Type = C
State Rank = S4
State Listed = N/A
Federal Rank =

Type = C
State Rank = S3
State Listed = N/A
Federal Rank =

Type = C
State Rank = S5
State Listed = N/A
Federal Rank =

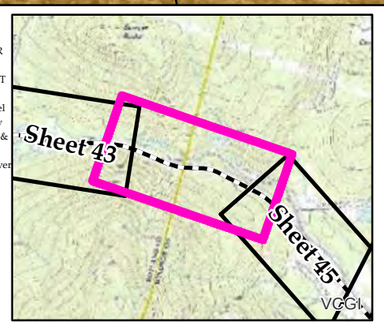
1350 1300 1250 1200 1150 1400 1450 1500

145.6 145.7 146.1 146.2 146.3 146.4 146.5 146.6 146.7 146.8

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC
Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 44 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

Type = C
State Rank = S3
State Listed = N/A
Federal Rank =

Type = C
State Rank = S4
State Listed = N/A
Federal Rank =

Type = C
State Rank = S5
State Listed = N/A
Federal Rank =

ROD & GUN CLUB RD

LUDLOW (LU)

Branch Brook

BUTTERMILK FALLS RD

Unnamed Trib to Black River

MAPLE LN

LOCUST HILL RD

RANTA RD

Coleman Brook

OKEMO RIDGE RD

T-LU-AS-30(E)

T-LU-S30(E)

T-LU-AW-15

T-LU-W15

T-LU-S31(E)

T-LU-AW17

T-LU-W17

T-LU-W18

T-LU-AW-18

T-LU-AW-13

T-LU-W13

2014-RTE-ML-15
State Rank: S2
Status: Not Listed

T-LU-AS-2(P)

T-LU-S2(P)

T-LU-S3(P)

T-LU-AS-4(P)

T-LU-S4(P)

T-LU-AS4(P)

T-LU-AS5(P)

T-LU-S5(P)

T-LU-AW-1

T-LU-W1

VT 100

VT 103

1050
1100
1150
1200
1250
1300

146.8
146.9
147
147.1
147.2
147.3
147.4
147.5
147.6
147.7
147.8
147.9
148
148.1
148.2

Sheet 44

Sheet 46

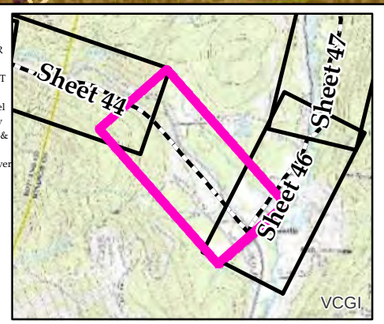
Sheet 47

VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC
Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

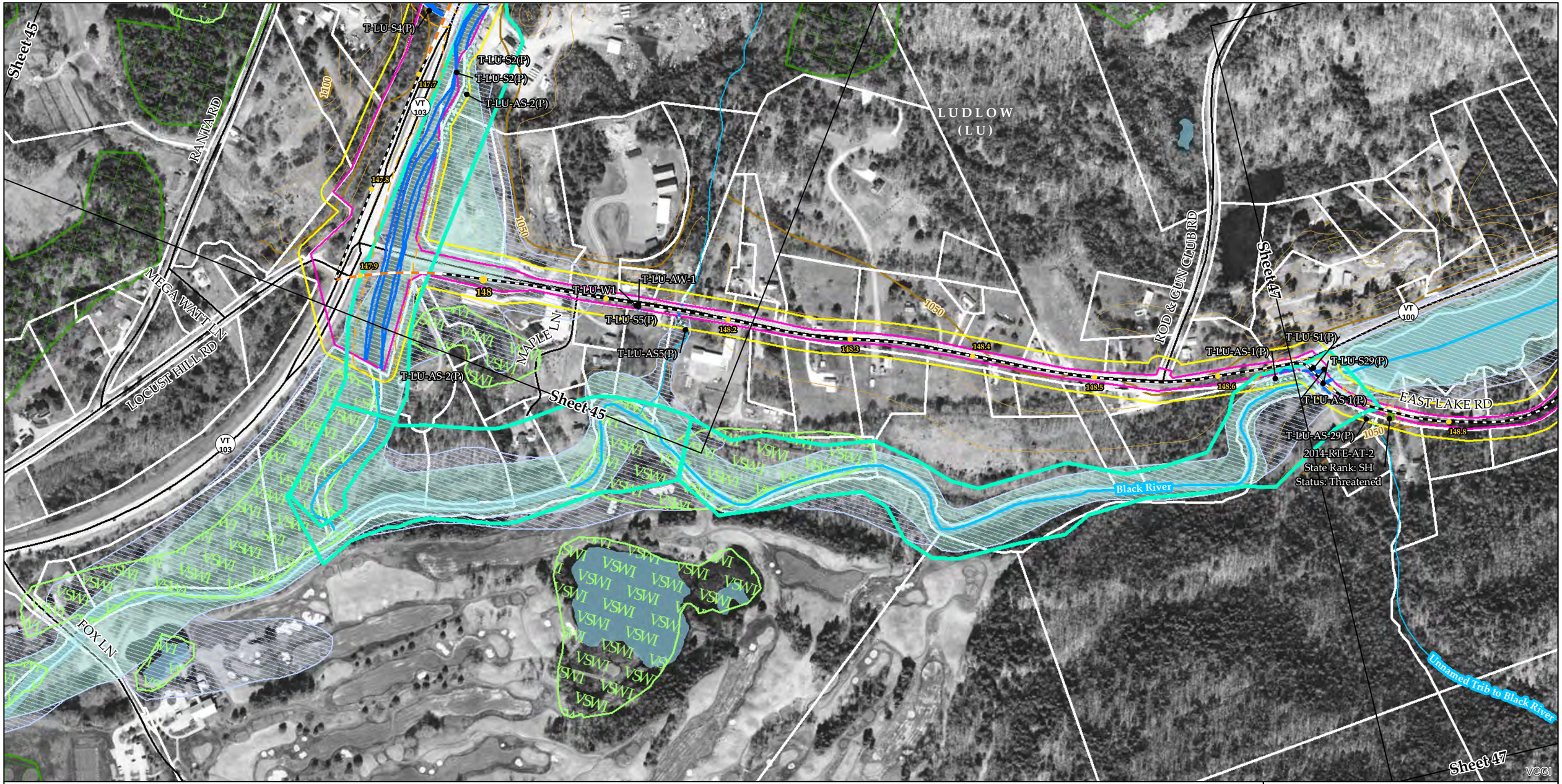
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 45 of 51

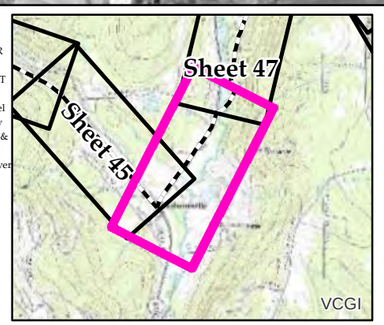
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 46 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

LUDLOW
(LU)

Sheet 46

Sheet 48

Sheet 49

Sheet 50

Sheet 45

Sheet 46

VT 100

Black River

Unnamed Trib to Black River

LAKE PAULINE RD

EAST LAKE RD

THOMSON DR

SPRUCE LN

DENARDIS RD

RED BRIDGE RD

T-LU-AS-1(P)
T-LU-AS-29(P)
T-LU-S29(P)
T-LU-S1(P)
T-LU-DITCH4(JD)
T-LU-AS-28(E)
T-LU-AW-12
T-LU-W12
T-LU-S28(E)
T-LU-AW-11
T-LU-AW-26
T-LU-AW-25
T-LU-AS-26(E)
T-LU-W11
T-LU-S27(E)
T-LU-AS-27(E)
T-LU-AS-25(E)
T-LU-S25(E)
T-LU-S26(E)
T-LU-S24(E)
T-LU-W10
T-LU-DITCH3(JD)
T-LU-AW-10
T-LU-AS-24(E)
T-LU-S23(E)
T-LU-S22(I)
T-LU-AS-22(I)

148.8
148.9
149.1
149.2
149.3
149.4
149.6
149.7
149.8
149.9

1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650

2014-RTE-AT-2
State Rank: SH
Status: Threatened

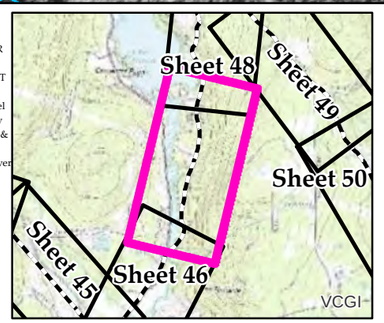
Type = P
State Rank = S2
State Listed = Y
Federal Rank =

Sheet 48 VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC
Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 47 of 51

November 6, 2014

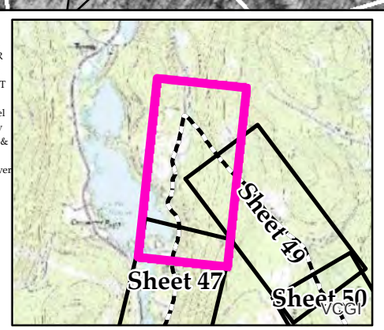
400 200 0 400

Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

RED BRIDGE RD
SPRUCE LN
ELLISONS LAKE RD
EAST LAKE RD
Unnamed Trib to Black River
LUDLOW (LU)
PLYMOUTH (PL)
Sheet 47
Sheet 49
Sheet 50
T-LU-AS-20(P)
T-LU-S20(P)
T-LU-S21(P)
T-LU-AS-21(P)
T-LU-AS-23(E)
T-LU-S22(I)
T-LU-S23(E)
T-LU-AS-22(I)
T-LU-AS-19(I)
T-LU-AW-9
T-LU-W9
T-LU-S19(P)
T-LU-AW-8
T-LU-W8
T-LU-S17(I)
T-LU-AS-17(I)
T-LU-AS-16(E)
T-LU-S16(E)
T-LU-W7
T-LU-AW-7
T-LU-AS-15(P)
T-LU-AS-14(I)
T-LU-S15(P)
T-LU-AS-13(I)
T-LU-S14(I)
T-LU-AS-12(P)
T-LU-S13(I)
T-LU-S12(P)
T-LU-AW-6
T-LU-W6
VSWI
VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

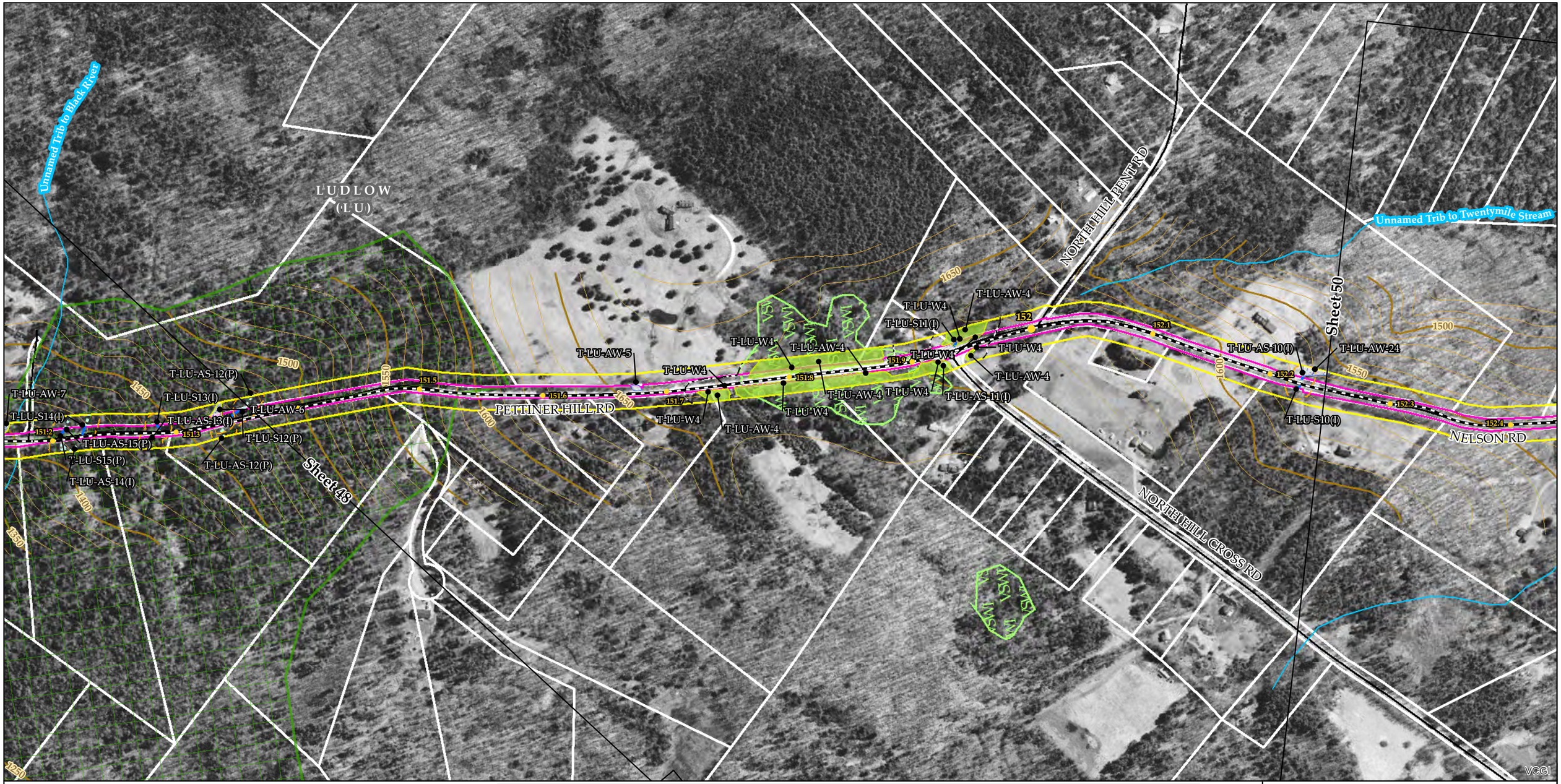
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 48 of 51

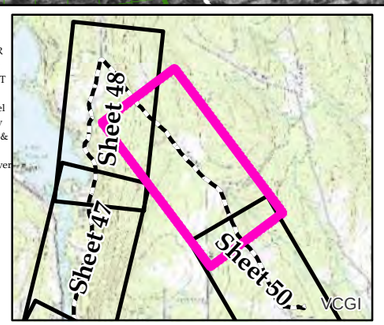
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 49 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

Proposed Stormwater Basin

AC Transmission Cable

Proposed Converter Station

Unnamed Trib to Twentymile Stream

CAVENDISH (CA)

NELSON RD

LUDLOW (LU)

BARKER RD

NORTH HILL CROSS RD

Sheet 49

T-LU-AW-24
T-LU-AS-9(E)
T-LU-S9(E)
T-LU-S7(E)
T-LU-AS-7(E)
T-LU-W3
T-LU-AW-3
T-LU-AW-2
T-LU-AS-6(I)
T-LU-W2
T-LU-DITCH1(JD)
T-LU-AW-23
T-LU-AW-23
T-LU-W19
T-LU-AW-20
T-LU-AW-20

1600 1550 1500 1450 1400 1350 1300 1250

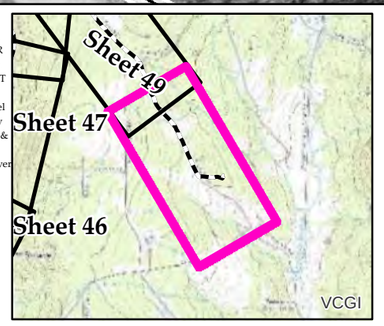
152.3 152.4 152.5 152.6 152.7 152.8 152.9 153 153.1 153.2 153.3 153.4 153.5 153.6 153.7 153.8

VCGI

Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).

vhb

TRC Results you can rely on



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

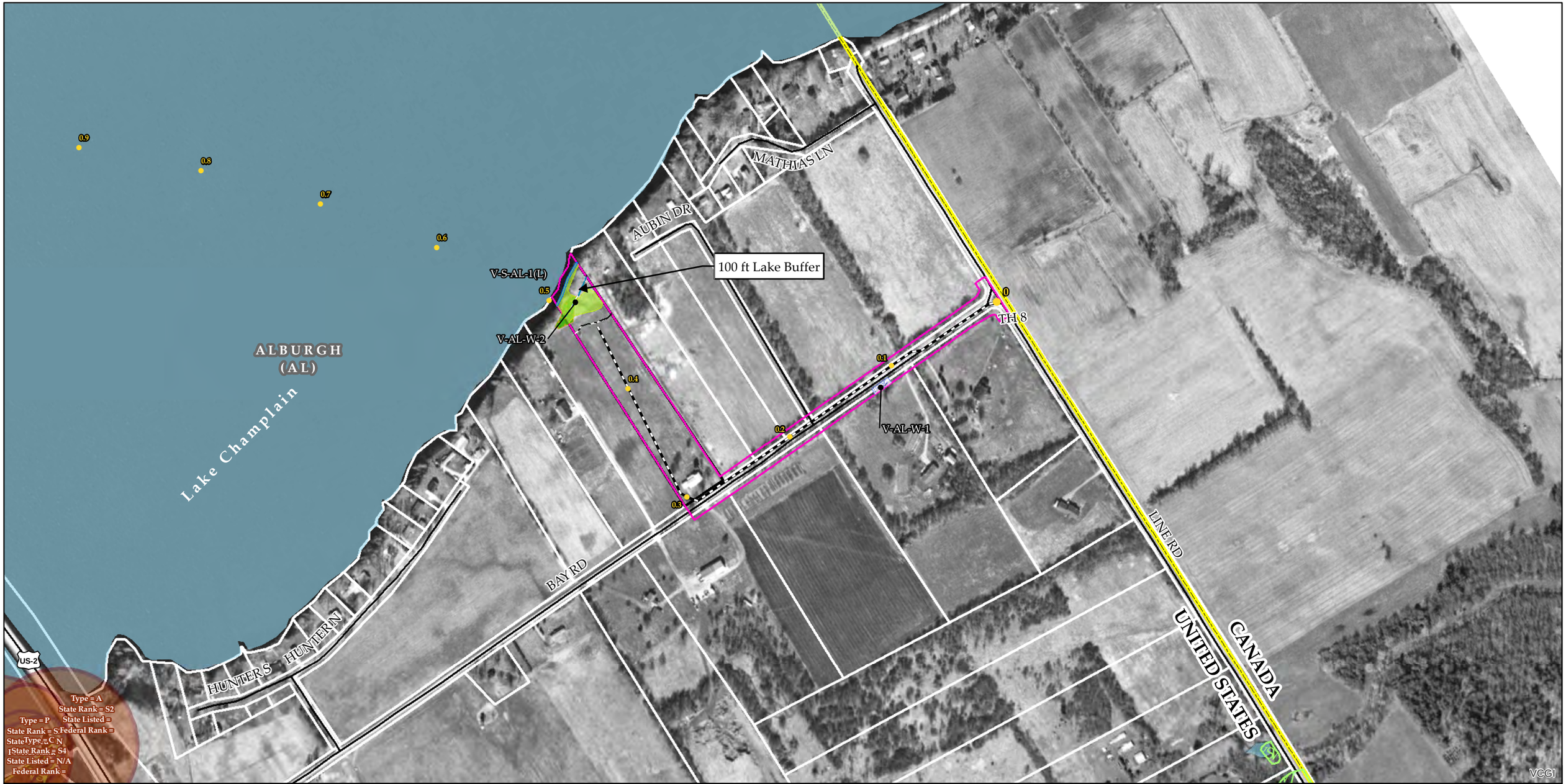
TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 50 of 51

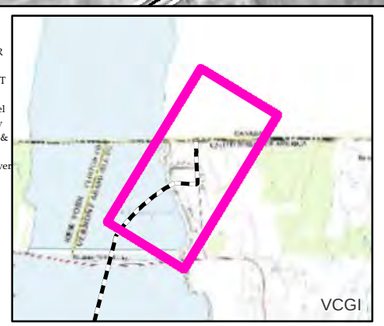
November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014



Sources: Background provided by VCGI (2007-2013); Provided by VCGI: Roads by VTrans (2012); NRCS Soils by NRCS (2008); Streams & Waterbodies by VHD (2010), VSWI Wetlands by ANR (2013), Deer Wintering Area by ANR (2013), County and Town Boundaries by VCGI (2012); Bear Crossing & Feeding Data by VT Fish & Wildlife (2001) Provided by TRC: Contours (2014), Conceptual Project Alignment (2014), VTrans ROW (2014), Parcel Boundaries (2009-2013) 100-year flood & Floodway compiled by TRC from FEMA (2014), Wetland & Stream Delineations by TRC & VHB (2014); Bat tree, Natural Community and RTE data assessments completed by Arrowwood Environmental (2014); River Corridors provided by VTDEC (2014).



NECPL Proposed Overland Alignment (TRC)
- Horizontal Directional Drilling (HDD)
- Jack and Bore
- Terrestrial Cable (Trenching)
- Mile Post (TRC)
- Project Parcel
- Parcel Boundary
- Study Area
- Approximate Study Area
- Sheet Outline

- Proposed Class II Wetland (TRC/VHB)
- Proposed Class III Wetland (TRC/VHB)
- Proposed 50' Class II Wetland Buffer (VHB)
- Approximate Stream (TRC/VHB)
- Delineated Stream (TRC/VHB)
- RTE Plants (AE)
- Natural Resource Buffer (VHB)
- Potential Bat Tree (AE)
- Natural Community (AE)
- Uncommon (S3) Plants (AE)
- Deer Wintering Area (AE)

NHI Element Occurrence (VTFW)
- RTEs
- Significant Natural Community
- Bear Crossing (VTFW)
- Bear Feeding (VTFW)
- Deer Wintering Area (ANR)
- VSWI Wetland (ANR)
- Named VHD Stream (VCGI)
- Unnamed VHD Stream (VCGI)

- Floodway (FEMA)
- 100 year floodplain (FEMA)
- River Corridor (VTDEC)
- Waterbody (VHD)
- Town Boundary (VCGI)
- Country Boundary (VCGI)
- Road (VTrans)
- 50 Ft. Contour
- 10 Ft. Contour

TDI - NECPL Project
Overland Component
Rutland, Windsor, & Grand Isle Counties, VT
Natural Resource Map Series

Sheet Number 51 of 51

November 6, 2014

400 200 0 400 Feet

\\VTNFDATA\projects\57666.00 NE Clean Power Link\GIS\Project\NR_Maps\NRMaps_11x17_400scale.mxd exported by:acoplin On 11/6/2014

ATTACHMENT 2

TDI- NECPL
Summary of Delineated and Approximated Streams/Waters
Prepared by VHB/TRC
Date November 6, 2014

Natural Resource Map Series Page Number	Waters ID	Mile Post	Waters Name	Town	Mapping Type (Center, TB, and/or OHW)	Average Ordinary High Water Width (OHW) Feet[1]	Flow Regime (Perennial, Intermittent, Ephemeral and Ditch)[2]	Watershed Size > 0.5 square miles (Yes/No)[3]	VWQS Water Classification[4]	2012 Impaired or Priority Surface Waters[5] (Yes/No)
1	V-BE-LC	98	Lake Champlain	Benson	OHW	NA	Open Water	No	B	No
1	V-BE-S-1	97.7	NA	Benson	Center	5	Intermittent	No	B	No
1	V-BE-S-2	97.7	NA	Benson	Center	3	Ephemeral	No	B	No
2	V-BE-S-6	99.4	NA	Benson	Center	4	Intermittent	No	B	No
2	V-BE-AS-3	98.9	NA	Benson	Digitized	3	Perennial	No	B	No
2	V-BE-AS-4	99	NA	Benson	Digitized	5	Perennial	No	B	No
2	V-BE-AS-5	99.3	NA	Benson	Digitized	7	Intermittent	Yes	B	No
2	V-BE-AS-6	99.4	NA	Benson	Digitized	4	Intermittent	No	B	No
2	V-BE-S-7	99.7	NA	Benson	Center	6	Intermittent	No	B	No
3	V-BE-S-8	100.5	UT to Hubbardton River	Benson	TOB	7	Perennial	No	B	No
3	V-BE-S-9	100.75	NA	Benson	Center	4	Jurisdictional Ditch	No	B	No
3	V-BE-AS-8	100.5	UT to Hubbardton River	Benson	Digitized	7	Perennial	No	B	No
3	V-BE-AS-9	100.7	NA	Benson	Digitized	4	Jurisdictional Ditch	No	B	No
3	V-BE-AS-7	99.8	NA	Benson	Digitized	6	Intermittent	No	B	No
3	V-BE-AS-10	101	NA	Benson	Digitized	5	Perennial	No	B	No
4	V-BE-S-100	102	NA	Benson	Center	3	Perennial	No	B	No
4	V-BE-S-12	115.3	NA	Benson	Center	4	Jurisdictional Ditch	No	B	No
4	V-BE-AS-100	102	NA	Benson	Digitized	3	Perennial	No	B	No
4	V-BE-AS-11	101.5	NA	Benson	Digitized	4	Intermittent	No	B	No
4	V-BE-AS-12	101.9	NA	Benson	Digitized	4	Jurisdictional Ditch	No	B	No
5	V-BE-S-101	102.8	NA	Benson	Center	1.5	Jurisdictional Ditch	No	B	No
5	V-BE-S-102	103	Unnamed Tributary to Hubbardton River	Benson	Center	3	Perennial	No	B	No
5	V-BE-S-103	103.4	NA	Benson	Center	1.5	Jurisdictional Ditch	No	B	No
5	V-BE-AS-101	102.8	NA	Benson	Digitized	1.5	Ditch	No	B	No
5	V-BE-AS-102	103	yes	Benson	Digitized	2	Intermittent	No	B	No
5	V-BE-AS-103	103.3	NA	Benson	Digitized	1.5	Ditch	No	B	No
6	V-BE-S-104	103.9	NA	Benson	Center	1	Jurisdictional Ditch	No	B	No
6	V-BE-S-105	104.3	NA	Benson	Center	1.5	Jurisdictional Ditch	No	B	No
6	V-BE-S-106	104.6	Hubbardton River	Benson	TOB	25	Perennial	Yes	B	No
6	V-BE-AS-104	103.9	NA	Benson	Digitized	1	Ditch	No	B	No
6	V-BE-AS-105	104.3	NA	Benson	Digitized	1.5	Intermittent	No	B	No
6	V-BE-AS-106	104.6	Hubbardton River	Benson	Digitized	25	Perennial	Yes	B	No
6	V-BE-S-107	104.7	NA	Benson	Center	1.5	Jurisdictional Ditch	No	B	No
6	V-BE-AS-107	104.7	NA	Benson	Digitized	1.5	Ditch	No	B	No
7	V-BE-S-109	105	Unnamed Tributary to Hubbardton River	Benson	Center	4	Perennial	No	B	No
7	V-WH-S-101	105.3	NA	West Haven	Center	2	Jurisdictional Ditch	No	B	No
7	V-BE-AS-109	105	NA	Benson	Digitized	4	Perennial	No	B	No
7	V-WH-AS-101	105.3	NA	West Haven	Digitized	2	Ditch	No	B	No
7	V-WH-AS-100	105.8	NA	West Haven	Digitized	2	Ditch	No	B	No
8	V-WH-S-4	106	UT to Poultney River	West Haven	Center	5	Perennial	No	B	No
8	V-WH-S-5	106.6	UT to Hubbardton River	West Haven	Center	3	Intermittent	No	B	No
8	V-WH-S-6	111.45	NA	West Haven	Center	3	Jurisdictional Ditch	No	B	No
8	V-WH-S-7	106.8	NA	West Haven	Center	2	Jurisdictional Ditch	No	B	No
8	V-WH-S-100	105.8	NA	West Haven	Center	2	Jurisdictional Ditch	No	B	No
8	V-WH-AS-4	106.1	Unnamed Tributary to Hubbardton River	West Haven	Digitized	5	Perennial	No	B	No
8	V-WH-AS-5	106.6	UT to Hubbardton River	West Haven	Digitized	3	Ditch	No	B	No
8	V-WH-AS-7	106.8	NA	West Haven	Digitized	2	Ditch	No	B	No
9	V-WH-S-2	107.9	UT to Poultney River	West Haven	Center	4.5	Perennial	Yes	B	No
9	V-WH-S-3	107.6	NA	West Haven	Center	2	Ephemeral	No	B	No
9	V-WH-AS-2	107.9	UT to Poultney River	West Haven	Digitized	4.5	Ephemeral	No	B	No
9	V-WH-AS-3	107.6	NA	West Haven	Digitized	2	Ephemeral	No	B	No
9	V-WH-S-1	108	NA	West Haven	Center	2	Intermittent	No	B	No
9	V-WH-AS-1	108.1	NA	West Haven	Digitized	2	Intermittent	No	B	No
10	V-FH-S-22	109	UT to Poultney River	Fair Haven	Center	2	Ephemeral	No	B	No
10	V-FH-S-23	108.9	NA	Fair Haven	Center	2	Intermittent	No	B	No
10	V-FH-S-24	108.8	NA	Fair Haven	Center	2	Intermittent	No	B	No
10	V-FH-S-25	108.3	NA	Fair Haven	Center	5	Perennial	No	B	No
10	V-FH-AS-23	108.9	NA	Fair Haven	Digitized	2	Intermittent	No	B	No
10	V-FH-AS-24	108.7	NA	Fair Haven	Digitized	2	Intermittent	No	B	No
10	V-FH-AS-25	108.2	NA	Fair Haven	Digitized	5	Perennial	No	B	No
10	V-SH-AS-22	109	NA	Shrewsbury	Digitized	1	Ephemeral	No	B	No
10	V-FH-S-18	109.3	UT to Poultney River	Fair Haven	Center	2	Intermittent	No	B	No
10	V-FH-AS-18	109.2	UT to Poultney River	Fair Haven	Digitized	2	Intermittent	No	B	No
10	V-FH-AS-19	109.1	NA	Fair Haven	Digitized	3	Ditch	No	B	No
11	V-FH-S-12	110.1	NA	Fair Haven	Center	2	Jurisdictional Ditch	No	B	No
11	V-FH-S-13	110.1	Mud Brook	Fair Haven	TOB	18	Perennial	Yes	B	No
11	V-FH-S-15	110	NA	Fair Haven	Center	2	Jurisdictional Ditch	No	B	No
11	V-FH-S-16	109.9	NA	Fair Haven	Center	2	Ephemeral	No	B	No
11	V-FH-S-17	109.5	UT to Mud Brook	Fair Haven	Center	3	Perennial	No	B	No
11	V-FH-AS-13	110	NA	West Haven	Digitized	18	Perennial	Yes	B	No
11	V-FH-AS-16	109.9	NA	Fair Haven	Digitized	2	Perennial	No	B	No
11	V-FH-AS-17	109.5	UT to Mud Brook	Fair Haven	Digitized	3	Perennial	No	B	No
11	V-FH-S-3	110.4	NA	Fair Haven	Center	1.5	Jurisdictional Ditch	No	B	No

11	V-FH-AS-3	110.4	NA	Fair Haven	Digitized	1.5	Jurisdictional Ditch	No	B	No
12	V-FH-S-4	110.7	NA	Fair Haven	Center	1.5	Ephemeral	No	B	No
12	V-FH-S-9	111.1	NA	Castleton	Center	3	Intermittent	No	B	No
12	V-FH-S-26	111.1	NA	Fair Haven	Center	2	Jurisdictional Ditch	No	B	No
12	V-FH-S-5	110.8	NA	Fair Haven	Center	4	Perennial	No	B	No
12	V-FH-S-5a	111.1	UT to Mud Brook	Fair Haven	Center	1	Ephemeral	No	B	No
12	V-FH-AS-4	110.7	NA	Fair Haven	Digitized	1.5	Perennial	No	B	No
12	V-FH-AS-5	110.8	NA	Fair Haven	Digitized	4	Perennial	No	B	No
12	V-FH-AS-6	111.4	NA	Fair Haven	Digitized	2	Intermittent	No	B	No
12	V-FH-S-6	111.4	NA	Fair Haven	Center	2	Intermittent	No	B	No
13	V-FH-S-10	111.6	UT to Castleton River	Fair Haven	Center	2	Perennial	Yes	B	No
13	V-FH-S-11	133.9	NA	Fair Haven	Center	1	Ephemeral	No	B	No
13	V-FH-S-7	111.9	NA	Fair Haven	Center	1	Ephemeral	No	B	No
13	V-FH-AS-7	111.9	NA	Fair Haven	Digitized	1	Ephemeral	No	B	No
13	V-FH-S-8	112.4	NA	Castleton	Center	3	Intermittent	No	B	No
13	V-CN-S-100	112.6	NA	Castleton	Center	2	Ephemeral	No	B	No
13	V-CN-AL-1	112.6	NA	Castleton	Digitized	2	Open Water	No	B	No
13	V-CN-L-1	112.6	NA	Castleton	OHW	NA	Open Water	No	B	No
14	V-CN-S-101	113	Unnamed Tributary To Castleton River	Castleton	Center	3.5	Perennial	Yes	B	No
14	V-CN-AS-101	113	Unnamed Tributary To Castleton River	Castleton	Digitized	3.5	Perennial	No	B	No
15	V-CN-S-103	113.9	NA	Castleton	Center	2	Intermittent	No	B	No
15	V-CN-S-102	114.6	NA	Castleton	Center	2	Intermittent	No	B	No
16	V-CN-S-11	115.1	NA	Castleton	Center	1	Intermittent	No	B	No
16	V-CN-S-12	115.3	UT to Castleton River	Castleton	TOB	16	Perennial	Yes	B	No
16	V-CN-S-12a	115.3	NA	Castleton	Center	1	Ephemeral	No	B	No
16	V-CN-S-13	115.6	NA	Castleton	Center	1	Intermittent	No	B	No
16	V-CN-S-14	115.6	NA	Castleton	Center	3	Ephemeral	No	B	No
16	V-CN-AS-11	115.2	NA	Castleton	Digitized	1	Intermittent	No	B	No
16	V-CN-AS-12	115.3	UT to Castleton River	Castleton	Digitized	16	Perennial	Yes	B	No
16	V-CN-AS-12a	115.3	NA	Castleton	Digitized	1	Ephemeral	No	B	No
16	V-CN-AS-13	115.6	NA	Castleton	Digitized	1	Intermittent	No	B	No
16	V-CN-AS-14	115.6	NA	Castleton	Digitized	3	Ephemeral	No	B	No
16	V-CN-AS-1a	NA	NA	Castleton	Digitized	2	Intermittent	No	B	No
16	V-CN-S-15	115.8	NA	Castleton	Center	2	Ephemeral	No	B	No
17	V-CN-S-8	116.4	North Branch Brook	Castleton	TOB	26	Perennial	Yes	B	No
17	V-CN-S-9	116.5	NA	Castleton	Center	3	Intermittent	No	B	No
17	V-CN-S-9a	116.55	NA	Castleton	Center	2	Ephemeral	No	B	No
17	V-CN-AS-8	116.4	North Branch Brook	Castleton	Digitized	26	Perennial	Yes	B	No
17	V-CN-S-5	116.8	NA	Castleton	Center	2	Ephemeral	No	B	No
17	V-CN-AS-5	116.9	NA	Castleton	Digitized	2	Ephemeral	No	B	No
18	V-CN-S-3	117.8	UT to Castleton River	Castleton	Center	0.5	Intermittent	No	B	No
18	V-CN-S-4	117.6	UT to Castleton River	Castleton	Center	5	Perennial	No	B	No
18	V-CN-S-6	117.4	NA	Castleton	Center	3	Intermittent	No	B	No
18	V-CN-S-7	117.1	NA	Castleton	Center	1	Ephemeral	No	B	No
18	V-CN-AS-3	117.8	UT to Castleton River	Castleton	Digitized	0.5	Intermittent	No	B	No
18	V-CN-AS-4	117.6	UT to Castleton River	Castleton	Digitized	5	Perennial	No	B	No
18	V-CN-AS-6	117.4	NA	Castleton	Digitized	3	Intermittent	No	B	No
18	V-CN-AS-7	117.1	NA	Castleton	Digitized	1	Ephemeral	No	B	No
18	V-CN-S-10	118	118	Castleton	Center	3	Perennial	No	B	No
19	V-CN-S-2	118.25	UT to Castleton River	Castleton	Center	2.5	Intermittent	No	B	No
19	V-CN-AS-1	119	NA	Castleton	Digitized	2	Intermittent	No	B	No
19	V-CN-S-1	119	NA	Castleton	Center	2	Intermittent	No	B	No
19	V-CN-AS-2	118.3	UT to Castleton River	Castleton	Digitized	2.5	Intermittent	No	B	No
19	T-IR-S5	119.1	NA	Ira	Center	2	Intermittent	No	B	No
20	T-IR-DITCH1	119.65	NA	Ira	Center	3	Jurisdictional Ditch	No	B	No
20	T-IR-S6	119.4	NA	Ira	Center	1	Intermittent	No	B	No
20	T-IR-S3	119.8	NA	Ira	Center	5	Intermittent	No	B	No
20	T-IR-S4	119.5	NA	Ira	Center	5	Perennial	Yes	B	No
20	T-IR-AS-3	119.8	NA	Ira	Digitized	5	Intermittent	No	B	No
20	T-IR-AS-4	119.5	Unnamed Tributarty to Castelton River	Ira	Digitized	5	Perennial	Yes	B	No
20	T-WR-S35	120.3	NA	West Rutland	Center	1	Intermittent	No	B	No
20	T-IR-S1	120.2	NA	Ira	Center	4	Intermittent	No	B	No
20	T-IR-S2	120.1	NA	Ira	Center	2	Intermittent	No	B	No
20	T-IR-AS1	120.1	NA	Ira	Digitized	4	Intermittent	No	B	No
21	T-WR-S30	120.7	NA	West Rutland	Center	5	Intermittent	No	B	No
21	T-WR-S31	120.5	NA	West Rutland	Center	1	Intermittent	No	B	No
21	T-WR-S32	120.8	NA	West Rutland	Center	3	Ephemeral	No	B	No
21	T-WR-S33	120.85	NA	West Rutland	Center	4	Intermittent	No	B	No
21	T-WR-S34	121	NA	West Rutland	Center	3	Perennial	No	B	No
21	T-WR-AS-31	120.5	NA	West Rutland	Digitized	1	Intermittent	No	B	No
21	T-WR-AS-37	120.9	NA	West Haven	Digitized	3	Intermittent	No	B	No
22	T-WR-S19	122.3	NA	West Rutland	Center	3	Intermittent	No	B	No
22	T-WR-S29	121.5	Castleton River	West Rutland	TOB	30	Perennial	Yes	B	No
22	T-WR-S28	121.6	NA	West Rutland	Center	6	Perennial	No	B	No
22	T-WR-AS-28	121.7	NA	West Rutland	Digitized	6	Perennial	No	B	No
22	T-WR-AS29	121.5	Castleton River	West Rutland	Digitized	30	Perennial	Yes	B	No
22	T-WR-S21	122.4	NA	West Rutland	Center	4	Intermittent	No	B	No
22	T-WR-S20	122.4	NA	West Rutland	Center	5	Intermittent	No	B	No
23	T-WR-S22	122.75	NA	West Rutland	Center	4	Ephemeral	No	B	No
23	T-WR-S24	122.9	NA	West Rutland	Center	3	Intermittent	No	B	No
23	T-WR-DITCH6	123	NA	West Rutland	Center	1	Jurisdictional Ditch	No	B	No

23	T-WR-S25	122.95	NA	West Rutland	Center	1	Ephemeral	No	B	No
23	T-WR-S23	122.8	NA	West Rutland	Center	4	Intermittent	No	B	No
23	T-WR-S26	122.7	NA	West Rutland	Center	2	Intermittent	No	B	No
23	T-WR-S27	122.6	NA	West Rutland	Center	2	Ephemeral	No	B	No
23	T-WR-S17	123.4	NA	West Rutland	Center	2	Intermittent	No	B	No
23	T-WR-S18	123.2	NA	West Rutland	OHW	10	Perennial	Yes	B	No
23	T-WR-AS-17	123.5	NA	West Rutland	Digitized	2	Intermittent	No	B	No
23	T-WR-AS-18	123.2	NA	West Rutland	Digitized	10	Perennial	Yes	B	No
23	T-WR-AS-22	122.7	NA	West Rutland	Digitized	4	Ephemeral	No	B	No
23	T-WR-S36	123.6	Clarendon River	Rutland	TOB	30	Perennial	Yes	B	No
23	T-WR-DITCH5	NA	NA	West Rutland	Center	30	Jurisdictional Ditch	No	B	No
23	T-WR-AS-36	123.6	Clarendon River	Rutland	Digitized	30	Perennial	Yes	B	No
24	T-WR-S4	124.3	NA	West Rutland	Center	2	Intermittent	No	B	No
24	T-WR-S6	124.3	NA	West Rutland	Center	3	Intermittent	No	B	No
24	T-WR-S7	124.3	NA	West Rutland	Center	2	Intermittent	No	B	No
24	T-WR-S5	124.3	NA	West Rutland	Center	5	Intermittent	No	B	No
24	T-WR-DITCH2	124.4	NA	West Rutland	Center	2	Jurisdictional Ditch	No	B	No
24	T-WR-S8	124.4	NA	West Rutland	Center	2	Ephemeral	No	B	No
24	T-WR-S11	124	NA	West Rutland	Center	3	Intermittent	No	B	No
24	T-WR-S13	124.1	NA	West Rutland	Center	1	Ephemeral	No	B	No
24	T-WR-S15	124.2	NA	West Rutland	Center	2	Ephemeral	No	B	No
24	T-WR-S14	124.2	NA	West Rutland	Center	1	Intermittent	No	B	No
24	T-WR-S16	124.15	NA	West Rutland	Center	4	Ephemeral	No	B	No
24	T-WR-S12	124.1	NA	West Rutland	Center	4	Intermittent	No	B	No
24	T-WR-AS-11	124	NA	West Rutland	Digitized	3	Intermittent	No	B	No
24	T-WR-AS-14	124.2	NA	West Rutland	Digitized	1	Intermittent	No	B	No
24	T-WR-AS-15	124.2	NA	West Rutland	Digitized	2	Ephemeral	No	B	No
24	T-WR-AS-16	NA	NA	West Rutland	Digitized	4	Ephemeral	No	B	No
24	T-WR-AS-3	NA	NA	West Rutland	Digitized	5	Intermittent	No	B	No
24	T-WR-AS-4	124.4	NA	West Rutland	Digitized	2	Intermittent	No	B	No
24	T-WR-AS-5	124.3	NA	West Rutland	Digitized	5	Intermittent	No	B	No
24	T-RU-S7	124.8	NA	Rutland	Center	5	Intermittent	No	B	No
24	T-RU-S10	124.65	NA	Rutland	Center	3	Ephemeral	No	B	No
24	T-RU-S5	124.8	NA	Rutland	Center	2	Intermittent	No	B	No
24	T-RU-S6	124.8	NA	Rutland	Center	2	Ephemeral	No	B	No
24	T-RU-S8	124.8	NA	Rutland	Center	5	Ephemeral	No	B	No
24	T-RU-AS-7	NA	NA	Rutland	Digitized	5	Intermittent	No	B	No
25	T-WR-S1	125.3	NA	West Rutland	Center	4	Intermittent	No	B	No
25	T-WR-DITCH1	125.3	NA	West Rutland	Center	1	Jurisdictional Ditch	No	B	No
25	T-RU-DITCH4	125	NA	Rutland	Center	1	Jurisdictional Ditch	No	B	No
25	T-RU-AS-11	NA	NA	Rutland	Digitized	2	Intermittent	No	B	No
25	T-RU-AS-12	NA	NA	Rutland	Digitized	2	Intermittent	No	B	No
25	T-WR-S1	125.3	NA	West Rutland	Digitized	4	Intermittent	No	B	No
25	T-RU-S4	126.1	NA	Rutland	Center	2	Intermittent	No	B	No
25	T-RU-S4	126.1	NA	Rutland	Digitized	2	Intermittent	No	B	No
26	T-RU-S2	126.5	Otter Creek	Rutland	TOB	100	Perennial	Yes	B	No
26	T-RU-S3	126.3	NA	Rutland	Center	1.5	Intermittent	No	B	No
26	T-RU-DITCH2	126.1	NA	Rutland	Center	1.5	Jurisdictional Ditch	No	B	No
26	T-RU-AS-2	126.5	Otter Creek	Rutland	Digitized	100	Perennial	Yes	B	No
26	T-RU-AS-3	NA	NA	Rutland	Digitized	1.5	Intermittent	No	B	No
27	T-RU-S1	127.5	NA	Rutland	Center	2	Intermittent	No	B	No
27	T-RU-DITCH5	NA	NA	Rutland	Center	1	Jurisdictional Ditch	No	B	No
27	T-CL-S6	127.9	Cold River	Clarendon	TOB	75	Perennial	Yes	B	No
27	T-CL-AS-6	128	Cold River	Clarendon	Digitized	75	Perennial	Yes	B	No
28	T-CL-S4	128.5	NA	Clarendon	Center	15	Perennial	No	B	No
28	T-CL-DITCH5	128.6	NA	Clarendon	Center	6	Jurisdictional Ditch	No	B	No
28	T-CL-S5	128.6	NA	Clarendon	Center	2	Ephemeral	No	B	No
28	T-CL-S8	128.1	Trib to otter Creek	Clarendon	Center	3	Perennial	No	B	No
28	T-CL-AS-4	128.6	NA	Clarendon	Digitized	15	Perennial	No	B	No
28	T-CL-AS-5	128.6	NA	Clarendon	Digitized	2	Ephemeral	No	B	No
28	T-CL-AS-S4	128.6	NA	Clarendon	Digitized	5	Perennial	No	B	No
28	T-CL-S8	128.1	Tributary to Otter Creek	Clarendon	Digitized	3	Perennial	No	B	No
28	T-CL-AS-5a	128.6	NA	Clarendon	Digitized	6	Jurisdictional Ditch	No	B	No
29	T-CL-S1	129.7	NA	Clarendon	Center	2	Intermittent	No	B	No
29	T-CL-S3	129.5	NA	Clarendon	Center	3	Intermittent	No	B	No
29	T-CL-S2	129.5	NA	Clarendon	OHW	10	Perennial	Yes	B	No
29	T-CL-AS2	129.5	NA	Clarendon	Digitized	10	Perennial	No	B	No
30	T-WR-S9	130.8	NA	West Rutland	Center	1	Ephemeral	No	B	No
30	T-WR-AS-9	130.8	NA	West Rutland	Digitized	1	Ephemeral	No	B	No
30	T-CL-DITCH2	131.4	NA	Clarendon	Center	6	Jurisdictional Ditch	No	B	No
31	V-SH-S-16	132.5	NA	Shrewsbury	Center	3	Perennial	No	B	No
31	V-SH-S-17	132.5	NA	Shrewsbury	Center	2	Intermittent	No	B	No
31	V-SH-AS-16	132.6	NA	Shrewsbury	Digitized	3	Perennial	No	B	No
31	V-SH-AS-17	132.5	NA	Shrewsbury	Digitized	2	Intermittent	No	B	No
32	V-SH-S-14	133.2	UT to Mill River	Shrewsbury	TOB	25	Perennial	Yes	B	No
32	V-SH-S-13	133.3	NA	Shrewsbury	Center	1	Ephemeral	No	B	No
32	V-SH-S-15	132.65	NA	Shrewsbury	Center	2	Intermittent	No	B	No
32	V-SH-AS-14	133.3	UT to Mill River	Shrewsbury	Digitized	45	Perennial	Yes	B	No
32	V-SH-AS-15	132.6	NA	Shrewsbury	Digitized	2	Intermittent	No	B	No
32	V-SH-AS-1a	NA	NA	Shrewsbury	Digitized	1	Ephemeral	No	B	No
32	V-SH-AS-12	NA	NA	Shrewsbury	Digitized	12	Ephemeral	No	B	No

33	V-SH-S-7	NA	UT to Mill River	Shrewsbury	Center	2	Perennial	No	B	No
33	V-SH-S-8	NA	UT to Mill River	Shrewsbury	TOB	10	Perennial	No	B	No
33	V-SH-S-9	NA	NA	Shrewsbury	Center	3	Intermittent	No	B	No
33	V-SH-S-10	R134	NA	Shrewsbury	Center	1	Perennial	No	B	No
33	V-SH-S-11	133.9	NA	Shrewsbury	Center	4	Intermittent	No	B	No
33	T-SH-S1	134.1	NA	Shrewsbury	Center	5	Intermittent	No	B	No
33	T-SH-S2	134.2	Unnamed Trib to Mill R	Shrewsbury	TOB	25	Perennial	Yes	B	No
33	T-SH-S4	134.5	Unnamed Trib to Mill R	Shrewsbury	Center	5	Intermittent	No	B	No
33	T-SH-AS-1	R134.1	NA	Shrewsbury	Digitized	5	Intermittent	No	B	No
33	T-SH-AS-2	R134.2	Unnamed Trib to Mill R	Shrewsbury	Digitized	25	Perennial	Yes	B	No
33	T-SH-AS4	R134.6	Unnamed Trib to Mill R	Shrewbury	Digitized	5	Intermittent	No	B	No
33	V-SH-AS-10	R134	NA	Shrewsbury	Digitized	1	Perennial	No	B	No
33	V-SH-AS-11	R134	NA	Shrewsbury	Digitized	4	Intermittent	No	B	No
33	V-SH-AS-7	NA	UT to Mill River	Shrewsbury	Digitized	2	Perennial	No	B	No
33	V-SH-AS-8	NA	UT to Mill River	Shrewsbury	Digitized	10	Perennial	No	B	No
33	V-SH-AS-9	NA	NA	Shrewsbury	Digitized	3	Intermittent	No	B	No
33	T-SH-AS-4	R134.6	NA	Shrewsbury	Digitized	5	Intermittent	No	B	No
33	V-SH-S-1	NA	Mill River	Shrewsbury	TOB	55	Perennial	No	B	No
33	V-SH-AS-1	NA	Mill River	Shrewsbury	Digitized	55	Perennial	Yes	B	No
34	V-SH-S-3	NA	NA	Shrewsbury	Center	5	Intermittent	No	B	No
34	V-SH-S-4	NA	NA	Shrewsbury	Center	3	Intermittent	No	B	No
34	V-SH-S-5	NA	NA	Shrewsbury	Center	3	Ephemeral	No	B	No
34	V-SH-S-6	NA	UT to Mill River	Shrewsbury	Center	2	Intermittent	No	B	No
34	T-SH-S3	135.4	Unnamed Trib to Mill R	Shrewsbury	TOB	20	Perennial	Yes	B	No
34	T-SH-S5	135.6	NA	Shrewsbury	Center	3	Intermittent	No	B	No
34	T-SH-AS-3	R135.4	Unnamed Trib to Mill R	Shrewsbury	Digitized	20	Perennial	Yes	B	No
34	T-SH-AS-5	R135.7	NA	Shrewsbury	Digitized	3	intermittent	No	B	No
34	V-SH-AS-3	NA	NA	Shrewsbury	Digitized	5	Intermittent	No	B	No
34	V-SH-AS-4	NA	NA	Shrewsbury	Digitized	3	Intermittent	No	B	No
34	V-SH-AS-5	NA	NA	Shrewsbury	Digitized	3	Ephemeral	No	B	No
34	V-SH-AS-6	NA	UT to Mill River	Shrewsbury	Digitized	2	Intermittent	No	B	No
35	V-SH-S-2	NA	NA	Shrewsbury	Center	3	Intermittent	No	B	No
35	V-WA-S-3	NA	NA	Wallingford	Center	2	Ephemeral	No	B	No
35	V-WA-S-4	NA	Freeman Brook	Wallingford	TOB	38	Perennial	No	B	No
35	V-SH-S-2a	NA	NA	Shrewsbury	Center	3	Intermittent	No	B	No
35	T-SH-S6	135.9	NA	Shrewsbury	Center	3	Intermittent	No	B	No
35	T-SH-S7	135.9	NA	Shrewsbury	TOB	3	Perennial	No	B	No
35	T-SH-S9	136.1	NA	Shrewsbury	Center	1	Ephemeral	No	B	No
35	T-SH-S10	136.1	NA	Shrewsbury	TOB	3	Intermittent	No	B	No
35	T-SH-S11	136.5	NA	Shrewsbury	Center	2	Ephemeral	No	B	No
35	T-WA-S13	136.5	NA	Wallingford	Center	3	Intermittent	No	B	No
35	T-WA-S1	136.7	Freeman Brook	Wallingford	TOB	30	Perennial	Yes	B	No
35	T-SH-AS-10	R136.2	NA	Shrewsbury	Digitized	3	Intermittent	No	B	No
35	T-SH-AS-6	R135.9	NA	Shrewsbury	Digitized	3	Intermittent	No	B	No
35	V-SH-AS-2	NA	NA	Shrewsbury	Digitized	3	Intermittent	No	B	No
35	V-SH-AS-2a	NA	NA	Shrewsbury	Digitized	3	Intermittent	No	B	No
35	V-WA-AS-3	NA	NA	Shrewsbury	Digitized	5	Ephemeral	No	B	No
35	V-WA-AS-4	NA	Freeman Brook	Wallingford	Digitized	38	Perennial	Yes	B	No
35	V-WA-AS-5	NA	NA	Wallingford	Digitized	5	Intermittent	No	B	No
35	T-WA-S2	136.9	NA	Wallingford	Center	1	Intermittent	No	B	No
36	V-WA-S-1	R137.5	Mill River	Wallingford	TOB	55	Intermittent	No	B	No
36	V-WA-S-6	137.5	NA	Wallingford	Center	2	Ephemeral	No	B	No
36	V-WA-S-103	137.7	NA	Wallingford	Center	3	Perennial	No	B	No
36	V-WA-S-105	137.6	NA	Wallingford	Center	3	Perennial	No	B	No
36	V-WA-S-106	137.5	No	Wallingford	Center	4	Perennial	No	B	No
36	T-WA-S4	137.2	NA	Wallingford	Center	6	Intermittent	No	B	No
36	T-WA-S5	137.2	NA	Wallingford	Center	3	Intermittent	No	B	No
36	T-WA-S6	137.4	NA	Wallingford	Center	4	Intermittent	No	B	No
36	T-WA-S3	137.1	NA	Wallingford	Center	6	Intermittent	No	B	No
36	T-WA-AS3	R137.1	NA	Wallingford	Digitized	6	Intermittent	No	B	No
36	T-WA-AS4	R137.1	NA	Wallingford	Digitized	6	Intermittent	No	B	No
36	T-WA-AS6	R137.4	NA	Wallingford	Digitized	4	Intermittent	No	B	No
36	V-WA-AS-1	R137.5	Mill River	Wallingford	Digitized	55	Perennial	Yes	B	No
36	V-WA-AS-103	137.7	NA	Wallingford	Digitized	3	Perennial	No	B	No
36	V-WA-AS-104	137.7	NA	Wallingford	Digitized	5	Intermittent	No	B	No
36	V-WA-AS-105	137.6	NA	Wallingford	Digitized	3	Perennial	No	B	No
36	V-WA-AS-106	137.5	Unnamed Tributary to Mill River	Wallingford	Digitized	4	Perennial	No	B	No
36	V-WA-S-102	137.95	NA	Wallingford	Center	1	Jurisdictional Ditch	No	B	No
36	V-WA-AS-101	137.9	Mill River	Wallingford	Digitized	55	Perennial	Yes	B	No
36	V-WA-AS-102	138	NA	Wallingford	Digitized	1	Jurisdictional Ditch	No	B	No
37	V-WA-S-100	138.3	NA	Wallingford	Center	2	Intermittent	No	B	No
37	T-MH-DITCH15	139.1	NA	Mount Holly	Center	6	Jurisdictional Ditch	No	B	No
37	T-MH-DITCH17	139	NA	Mount Holly	Center	1	Jurisdictional Ditch	No	B	No
37	T-MH-DITCH18	138.7	NA	Mount Holly	Center	2	Jurisdictional Ditch	No	B	No
37	T-MH-S37	139.1	NA	Mount Holly	Center	6	Perennial	No	B	No
37	T-MH-S38	138.9	NA	Mount Holly	Center	1	Ephemeral	No	B	No
37	T-MH-AS-37	139	NA	Mount Holly	Digitized	6	Perennial	No	B	No
37	T-MH-AS-38	138.8	NA	Mount Holly	Digitized	1	Ephemeral	No	B	No
37	T-MH-AS-39	138.5	NA	Mount Holly	Digitized	1	Ephemeral	No	B	No
37	T-MH-AS-40	138.8	NA	Mount Holly	Digitized	1	Ephemeral	No	B	No
37	V-MH-AS-100	138.4	NA	Mount Holly	Digitized	2	Intermittent	No	B	No

37	V-MH-AS-101	138.5	NA	Mount Holly	Digitized	2	Intermittent	No	B	No
37	V-WA-AS-100	138.2	NA	Wallingford	Digitized	2	Intermittent	No	B	No
37	T-MH-AS-34	139.2	NA	Mount Holly	Digitized	1	Ephemeral	No	B	No
37	T-MH-AS-35	139.1	NA	Mount Holly	Digitized	1	Ephemeral	No	B	No
37	T-MH-AS-36	139.1	NA	Mount Holly	Digitized	1	Ephemeral	No	B	No
38	T-MH-DITCH13	139.7	NA	Mount Holly	Center	1	Jurisdictional Ditch	No	B	No
38	T-MH-S30	139.7	NA	Mount Holly	Center	1	Intermittent	No	B	No
38	T-MH-DITCH14	139.75	NA	Mount Holly	Center	1	Jurisdictional Ditch	No	B	No
38	T-MH-DITCH16	139.4	NA	Mount Holly	Center	1	Jurisdictional Ditch	No	B	No
38	T-MH-S32	139.6	NA	Mount Holly	Center	1	Intermittent	No	B	No
38	T-MH-S31	139.55	NA	Mount Holly	TOB	25	Perennial	No	B	No
38	T-MH-S28	140.1	NA	Mount Holly	TOB	25	Perennial	Yes	B	No
38	T-MH-AS-28	140.1	Unnamed Tributary to Mill River	Mount Holly	Digitized	25	Perennial	Yes	B	No
38	T-MH-AS-29	139.9	NA	Mount Holly	Digitized	2	Intermittent	No	B	No
38	T-MH-AS-31	139.6	NA	Mount Holly	Digitized	25	Perennial	No	B	No
38	T-MH-AS-32	139.6	NA	Mount Holly	Digitized	1	Intermittent	No	B	No
38	T-MH-AS-33	139.3	NA	Mount Holly	Digitized	1	Intermittent	No	B	No
38	T-MH-AS-DITCH13	139.7	NA	Mount Holly	Digitized	1	Jurisdictional Ditch	No	B	No
38	T-MH-S27	140.4	NA	Mount Holly	Center	2	Ephemeral	No	B	No
38	T-MH-DITCH11	140.3	NA	Mount Holly	Center	3	Jurisdictional Ditch	No	B	No
38	T-MH-DITCH12	140.2	NA	Mount Holly	Center	1	Jurisdictional Ditch	No	B	No
38	T-MH-AS-11	140.25	NA	Mount Holly	Digitized	3	Jurisdictional Ditch	No	B	No
38	T-MH-AS-27	140.4	NA	Mount Holly	Digitized	2	Ephemeral	No	B	No
39	T-MH-S24	141.2	NA	Mount Holly	Center	3	Intermittent	No	B	No
39	T-MH-S26	140.8	NA	Mount Holly	Center	1	Ephemeral	No	B	No
39	T-MH-DITCH9	140.8	NA	Mount Holly	Center	3	Jurisdictional Ditch	No	B	No
39	T-MH-DITCH10	140.5	NA	Mount Holly	Center	1	Jurisdictional Ditch	No	B	No
39	T-MH-S25	140.9	NA	Mount Holly	Center	1	Intermittent	No	B	No
39	T-MH-AS-24	141.1	NA	Mount Holly	Digitized	3	Intermittent	No	B	No
39	T-MH-AS-25	140.9	NA	Mount Holly	Digitized	1	Intermittent	No	B	No
39	T-MH-AS-23	141.5	NA	Mount Holly	Digitized	4	Perennial	No	B	No
40	T-MH-S21	142.3	NA	Mount Holly	Center	3	Intermittent	No	B	No
40	T-MH-S22	141.8	NA	Mount Holly	Center	2	Intermittent	No	B	No
40	T-MH-AS-21	142.25	NA	Mount Holly	Digitized	3	Intermittent	No	B	No
40	T-MH-AS-41	142	NA	Mount Holly	Digitized	2	Intermittent	No	B	No
40	T-MH-AS-20	142.6	NA	Mount Holly	Digitized	4	Perennial	Yes	B	No
41	T-MH-AS-42	143.3	NA	Mount Holly	Digitized	3	Intermittent	No	B	No
41	T-MH-AS-43	143.4	NA	Mount Holly	Digitized	4	Intermittent	No	B	No
41	T-MH-AS-44	143.1	NA	Mount Holly	Digitized	3	Intermittent	No	B	No
41	T-MH-AS-45	142.9	NA	Mount Holly	Digitized	5	Perennial	No	B	No
42	T-MH-S15	144.3	NA	Mount Holly	Center	2	Intermittent	No	B	No
42	T-MH-S16	144.2	NA	Mount Holly	Center	1	Intermittent	No	B	No
42	T-MH-S17	144.1	NA	Mount Holly	Center	2	Ephemeral	No	B	No
42	T-MH-S18	144	NA	Mount Holly	Center	1	Ephemeral	No	B	No
42	T-MH-S19	143.9	NA	Mount Holly	Center	1	Ephemeral	No	B	No
42	T-MH-DITCH5	143.8	NA	Mount Holly	Center	2	Jurisdictional Ditch	No	B	No
42	T-MH-DITCH6	143.8	NA	Mount Holly	Center	1	Jurisdictional Ditch	No	B	No
42	T-MH-DITCH7	143.8	NA	Mount Holly	Center	2	Jurisdictional Ditch	No	B	No
42	T-MH-AS-17	144.1	NA	Mount Holly	Digitized	2	Ephemeral	No	B	No
42	T-MH-S14	144.5	NA	Mount Holly	TOB	12	Perennial	No	B	No
42	T-MH-AS-14	144.55	Unnamed Tributary to Branch Brook	Mount Holly	Digitized	12	Perennial	No	B	No
42	T-MH-AS-15	144.4	NA	Mount Holly	Digitized	2	Intermittent	No	B	No
42	T-MH-AS-3	145.8	NA	Mount Holly	Digitized	2	Ephemeral	No	B	No
42	T-MH-AS-4a	145.3	NA	Mount Holly	Digitized	3	Jurisdictional Ditch	No	B	No
42	T-MH-AS-4b	145.3	NA	Mount Holly	Digitized	6	Intermittent	No	B	No
42	T-MH-AS-4c	145.3	NA	Mount Holly	Digitized	2	Ephemeral	No	B	No
43	T-MH-S10	145.1	Branch Brook	Mount Holly	TOB	30	Perennial	Yes	B	No
43	T-MH-S4	145.4	NA	Mount Holly	Center	6	Intermittent	No	B	No
43	T-MH-AS-10	145.1	Branch Brook	Mount Holly	Digitized	30	Perennial	Yes	B	No
43	T-MH-AS-12	144.8	NA	Mount Holly	Digitized	2	Ephemeral	No	B	No
43	T-MH-AS-13	144.7	NA	Mount Holly	Digitized	2	Ephemeral	No	B	No
43	T-MH-AS-8	145.3	NA	Mount Holly	Digitized	2	Ephemeral	No	B	No
43	T-MH-S5	145.8	NA	Mount Holly	Center	2	Intermittent	No	B	No
43	T-MH-AS-5	145.7	NA	Mount Holly	Digitized	2	Intermittent	No	B	No
43	T-MH-AS-6	145.6	NA	Mount Holly	Digitized	3	Ephemeral	No	B	No
44	T-LU-S32	146.4	NA	Ludlow	Center	15	Intermittent	No	B	No
44	T-LU-S33	146.45	NA	Ludlow	Center	6	Ephemeral	No	B	No
44	T-LU-S34	146.5	NA	Ludlow	Center	2	Intermittent	No	B	No
44	T-LU-S37	146.55	NA	Ludlow	Center	2	Ephemeral	No	B	No
44	T-MH-DITCH1	145.9	NA	Mount Holly	Center	5	Jurisdictional Ditch	No	B	No
44	T-LU-S38	146.6	NA	Ludlow	Center	15	Ephemeral	No	B	No
44	T-LU-S36	146.5	NA	Ludlow	Center	1	Ephemeral	No	B	No
44	T-LU-S35	146.5	NA	Ludlow	OHW	10	Intermittent	No	B	No
44	T-MH-S2	146	NA	Mount Holly	Center	4	Ephemeral	No	B	No
44	T-MH-S3	145.9	NA	Mount Holly	Center	2	Ephemeral	No	B	No
44	T-MH-S1	146.1	NA	Mount Holly	TOB	7	Perennial	No	B	No
44	T-LU-AS32	146.4	NA	Ludlow	Digitized	15	Intermittent	No	B	No
44	T-LU-AS-34	146.5	NA	Ludlow	Digitized	2	Intermittent	No	B	No
44	T-LU-AS-35	146.5	NA	Ludlow	Digitized	10	Intermittent	No	B	No
44	T-LU-AS-37	146.55	NA	Ludlow	Digitized	2	Ephemeral	No	B	No
44	T-MH-AS-1	146.1	NA	Mount Holly	Digitized	7	Perennial	No	B	No

44	T-MH-AS-2	145.9	NA	Mount Holly	Digitized	4	Ephemeral	No	B	No
44	T-LU-S31	146.7	NA	Ludlow	Center	4	Ephemeral	No	B	No
44	T-LU-AS-34a	146.5	NA	Ludlow	Digitized	8	Perennial	No	B	No
45	T-LU-S30	146.9	NA	Ludlow	Center	2	Ephemeral	No	B	No
45	T-LU-S3	147.6	NA	Ludlow	Center	2	Intermittent	No	B	No
45	T-LU-AS-30	146.8	NA	Ludlow	Digitized	2	Ephemeral	No	B	No
45	T-LU-AS4	147.65	Coleman brook	Ludlow	Digitized	15	Perennial	Yes	B	No
45	T-LU-S2	147.9	Branch Brook	Ludlow	TOB	59	Perennial	Yes	B	No
45	T-LU-S4	147.7	Coleman Brook	Ludlow	TOB	15	Perennial	Yes	B	No
45	T-LU-S5	148.1	NA	Ludlow	Center	3	Perennial	No	B	No
45	T-LU-AS-2	147.8	Branch Brook	Ludlow	Digitized	59	Perennial	Yes	B	No
45	T-LU-AS5	148.15	NA	Ludlow	Digitized	3	Perennial	No	B	No
46	T-LU-S1	148.6	Black River	Ludlow	TOB	50	Perennial	Yes	B	No
46	T-LU-S29	148.7	NA	Ludlow	Center	4	Perennial	No	B	No
46	T-LU-AS-1	148.7	Black River	Ludlow	Digitized	50	Perennial	Yes	B	No
46	T-LU-AS-29	148.7	Unnamed Tributary to Black River	Ludlow	Digitized	4	Perennial	No	B	No
47	T-LU-DITCH3	149.6	NA	Ludlow	Center	1	Jurisdictional Ditch	No	B	No
47	T-LU-S28	149	NA	Ludlow	Center	2	Ephemeral	No	B	No
47	T-LU-DITCH4	149	NA	Ludlow	Center	2	Jurisdictional Ditch	No	B	No
47	T-LU-S24	149.6	NA	Ludlow	Center	1	Ephemeral	No	B	No
47	T-LU-S25	149.5	NA	Ludlow	Center	4	Ephemeral	No	B	No
47	T-LU-S26	149.5	NA	Ludlow	Center	2	Ephemeral	No	B	No
47	T-LU-S27	149.4	NA	Ludlow	Center	1	Ephemeral	No	B	No
47	T-LU-AS-24	149.6	NA	Ludlow	Digitized	1	Ephemeral	No	B	No
47	T-LU-AS-25	149.55	NA	Ludlow	Digitized	4	Ephemeral	No	B	No
47	T-LU-AS-26	149.5	NA	Ludlow	Digitized	2	Ephemeral	No	B	No

47	T-LU-AS-27	149.4	NA	Ludlow	Digitized	1	Ephemeral	No	B	No
47	T-LU-AS-28	149	NA	Ludlow	Digitized	2	Ephemeral	No	B	No
47	T-LU-S22	149.9	NA	Ludlow	Center	3	Intermittent	No	B	No
47	T-LU-S23	149.8	NA	Ludlow	Center	3	Ephemeral	No	B	No
47	T-LU-AS-22	149.95	NA	Ludlow	Digitized	3	Intermittent	No	B	No
47	T-LU-AS-23	149.85	NA	Ludlow	Digitized	3	Ephemeral	No	B	No
48	T-LU-S16	151.1	NA	Ludlow	Center	1	Ephemeral	No	B	No
48	T-LU-S17	150.9	NA	Ludlow	Center	1	Intermittent	No	B	No
48	T-LU-S21	150.1	NA	Ludlow	Center	2	Perennial	No	B	No
48	T-LU-S20	150.1	NA	Ludlow	TOB	10	Perennial	Yes	B	No
48	T-LU-AS-16	151.1	NA	Ludlow	Digitized	1	Ephemeral	No	B	No
48	T-LU-AS-17	151	NA	Ludlow	Digitized	1	Intermittent	No	B	No
48	T-LU-AS-19	150.5	NA	Ludlow	Digitized	1	Intermittent	No	B	No
48	T-LU-AS-20	150.3	Unnamed trib Black River	Ludlow	Digitized	10	Perennial	Yes	B	No
48	T-LU-AS-21	150.1	NA	Ludlow	Digitized	2	Perennial	No	B	No
48	T-LU-S12	151.3	NA	Ludlow	Center	4	Perennial	No	B	No
48	T-LU-S13	151.3	NA	Ludlow	Center	2	Intermittent	No	B	No
48	T-LU-S14	151.2	NA	Ludlow	Center	2	Intermittent	No	B	No
48	T-LU-S15	151.2	NA	Ludlow	Center	6	Perennial	No	B	No
48	T-LU-AS-12	151.3	NA	Ludlow	Digitized	4	Perennial	No	B	No
48	T-LU-AS-13	151.3	NA	Ludlow	Digitized	2	Intermittent	No	B	No
48	T-LU-AS-14	151.2	NA	Ludlow	Digitized	2	Intermittent	No	B	No
48	T-LU-AS-15	151.2	NA	Ludlow	Digitized	6	Perennial	No	B	No
49	T-LU-S10	152.2	NA	Ludlow	Center	4	Intermittent	No	B	No
49	T-LU-S11	151.9	NA	Ludlow	Center	1	Intermittent	No	B	No
49	T-LU-AS-10	152.2	NA	Ludlow	Digitized	4	Intermittent	No	B	No
49	T-LU-AS-11	151.9	NA	Ludlow	Digitized	1	Intermittent	No	B	No
50	T-LU-DITCH1	152.65	NA	Ludlow	Center	1	Jurisdictional Ditch	No	B	No
50	T-LU-S7	152.5	NA	Ludlow	Center	3	Ephemeral	No	B	No
50	T-LU-S9	152.4	NA	Ludlow	Center	1	Ephemeral	No	B	No
50	T-LU-AS-6	152.7	NA	Ludlow	Digitized	2	Intermittent	No	B	No
50	T-LU-AS-7	152.55	NA	Ludlow	Digitized	3	Ephemeral	No	B	No
50	T-LU-AS-9	152.45	NA	Ludlow	Digitized	1	Ephemeral	No	B	No
51	V-S-AL-1	0.5	Lake Champlain	Alburgh	OHW	NA	Open Water	No	B	No

[1]U.S. Army Corps of Engineers (USACE). 2005. "Regulatory Guidance Letter. Subject: Ordinary High Water Mark Identification." No. 05-05.
[2]Stream flow regime determined based on qualitative observations of in stream hydrology indicators and geomorphic characteristic and are subject to professional judgment. Ditches were included in the delineation if they were determined to meet federal criteria for jurisdiction.
[3]Watershed size was determined from Vermont ANR Stream Alteration Regulatory Program mapping.
[4]Under Vermont Water Quality Standards (Vt. Code R. 12 004 052), Effective October 30,2014 all of the streams mapped are considered Class B Waters
[5] List of streams from the 2012 Vermont 303 (d) List

ATTACHMENT 3

TDI- NECPL
Summary of Delineated and Approximated Wetlands
Prepared by VHB/TRC
Date: November 6, 2014

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
1	V-BE-W-1	97.60	Benson	PSS	1L, 2L, 10P	c	Yes	V-BE-S-1	3305	Yes	II	Contiguous with Lake Champlain
1	V-BE-W-2	97.60	Benson	PFO	1P, 2P, 10P	c	No	V-BE-S-1	3928	Yes	II	Small wetland in distinct topographical break along a stream
2	V-BE-AW-3	98.90	Benson	PEM	1P, 10P	a,b	no	V-BE-AS-3	2738	Yes	II	Scrub-shrub wetland adjacent to stream; saturated soils and drainage patterns present
2	V-BE-AW-4	98.90	Benson	PEM	1P, 10P	a,b	yes	no	2382	Yes	II	Topographical depression; hydrologically connected to V-AW-3; drainage patterns
2	V-BE-W-5	99.00	Benson	PEM/PFO	1P, 2P, 10P	a,c	Yes	No	1101	Yes	II	Stream located outside of study area; located on northeast side of road
2	V-BE-AW-5	99.00	Benson	PEM/PFO	1P, 2P, 10P	a,c	Yes	No	2700	Yes	II	Stream located outside of study area; located on northeast side of road
2	V-BE-AW-6	99.00	Benson	PEM/PFO	1P, 2P, 10P	a,c	yes	V-BE-AS-4	3421	Yes	II	Stream located outside of study area; located on northeast side of road
2	V-BE-AW-7	99.30	Benson	PEM/PSS	1P, 2P, 10P	a, c	no	V-BE-AS-5, V-BE-AS-6	8992	Yes	II	Stream located outside of study area; larger wetland feature
2	V-BE-W-8	99.40	Benson	PEM	1P, 2H, 4P	a	No	V-BE-S-6	382	Yes	II	Wetland located on south side of North Lake Road; Amphibian breeding observed; forest and pasture buffer
2	V-BE-AW-8	99.40	Benson	PEM	1P, 2H, 4P	a	No	V-BE-S-6	16404	Yes	II	Wetland located on south side of North Lake Road; Amphibian breeding observed; forest and pasture buffer
2	V-BE-W-9	99.70	Benson	PEM/PSS/PFO	2P, 4P	a	Yes	No	433	Yes	II	Part of large mapped VSWI; saturated to surface; drainage patterns
2	V-BE-AW-9	99.70	Benson	PEM/PSS/PFO	2P, 4P	a	Yes	No	7380	Yes	II	Part of large mapped VSWI; saturated to surface; drainage patterns
2	V-BE-AW-10	99.70	Benson	PSS/PFO	1P, 2P, 4P	a	Yes	No	7853	Yes	II	Wetland located in topographical depression; drains across North Lake Road
2	V-BE-W-10	99.80	Benson	PSS/PFO	1P, 2P, 4P	a	Yes	No	3389	Yes	II	Wetland located in topographical depression; drains across North Lake Road
2	V-BE-W-11	99.90	Benson	PFO	1P, 2P, 4P	a	Yes	No	2331	Yes	II	Wetland feature has no inlet or outlet; buffers include roadway and hardwood forest
2	V-BE-AW-11	99.90	Benson	PFO	1P, 2P, 4P	a	Yes	No	9941	Yes	II	Wetland feature has no inlet or outlet; buffers include roadway and hardwood forest
3	V-BE-W-12	100.10	Benson	PSS/PFO	1P, 2P, 4P	a	Yes	No	99	Yes	II	Part of large mapped VSWI; located in topographical depression off of Old North Lake Road
3	V-BE-AW-12	100.10	Benson	PSS/PFO	1P, 2P, 4P	a	Yes	No	8165	Yes	II	Part of large mapped VSWI; located in topographical depression off of Old North Lake Road
3	V-BE-W-13	100.40	Benson	PSS	2L	NA	No	No	258	No	III	Small wetland feature in topographical depression; seep enhanced by road
3	V-BE-W-14	100.50	Benson	PSS/PFO	1P, 2H, 3P, 4H	a	Yes	V-BE-S-8	1483	Yes	II	Part of large mapped VSWI; Inundated in center with seeps
3	V-BE-AW-14	100.50	Benson	PSS/PFO	1P, 2H, 3P, 4H	a	Yes	V-BE-S-8	24987	Yes	II	Part of large mapped VSWI; Inundated in center with seeps
3	V-BE-W-15	100.70	Benson	PFO	1L, 2L, 10L	NA	No	No	1852	No	III	Small depressional wetland; saturated to surface
3	V-BE-AW-15	100.70	Benson	PFO	1L, 2L, 10L	NA	No	No	2828	No	III	Small Depressional wetland; saturated to surface
3	V-BE-AW-16	100.80	Benson	PEM	1P	NA	no	No	2760	No	III	Located in topographical depression; saturated to surface
3	V-BE-AW-17	101.00	Benson	PEM/PFO	1P	a	no	V-BE-AS-106	2936	Yes	II	Located in topographical depression; drainage patterns; surrounded by agricultural fields
4	V-BE-W-18	101.80	Benson	PSS	2L	NA	No	No	1	No	III	Drains farm fields and a seep; saturated to surface
4	V-BE-AW-18	101.80	Benson	PSS	2L	NA	No	No	3860	No	III	Drains farm fields and a seep; saturated to surface
4	V-BE-W-100	102.00	Benson	PEM	1P, 2P, 10P	a,c	No	V-BE-S-100	739	Yes	II	Emergent wetland adjacent to VHD-mapped stream
4	V-BE-AW-100	102.00	Benson	PEM	1P, 2P, 10P	a,c	No	V-BE-S-100	7364	Yes	II	Emergent wetland adjacent to VHD-mapped stream
4	V-BE-W-101	102.20	Benson	PEM	1L	NA	No	No	907	No	III	Small emergent wetland within active pasture
4	V-BE-AW-101	102.20	Benson	PEM	1L	NA	No	No	4406	No	III	Small emergent wetland within active pasture
5	V-BE-W-102	103.00	Benson	PEM/ OW	1P, 2P, 10P	a	Yes	V-BE-S-102	94	Yes	II	Emergent wetland with area of open water (impounded section of adjacent stream)
5	V-BE-AW-102	103.00	Benson	PEM/ OW	1P, 2P, 10P	a	Yes	V-BE-S-102	2274	Yes	II	Emergent wetland with area of open water (impounded section of adjacent stream)
5	V-BE-AW-103	103.30	Benson	PEM	1P	NA	no	No	4217	No	III	Located in topographical depression; saturated to surface; small wetland
6	V-BE-W-104	103.70	Benson	PEM	1L, 2L	NA	No	No	989	No	III	Small emergent wetland between active agricultural fields
6	V-BE-AW-104	103.70	Benson	PEM	1L, 2L	NA	No	No	1594	No	III	Small emergent wetland between active agricultural fields
6	V-BE-AW-106	103.80	Benson	PEM	1L, 2L	NA	no	No	1753	No	III	Small emergent wetland between active agricultural fields
6	V-BE-W-107	104.00	Benson	PEM	1L, 2L	NA	No	No	5144	No	III	Emergent wetland between roadway and active agricultural field
6	V-BE-AW-107	104.00	Benson	PEM	1L, 2L	NA	No	No	9518	No	III	Emergent wetland between roadway and active agricultural field
6	V-BE-AW-108	104.50	Benson	PEM/PSS	1P	NA	no	V-BE-AS-106	823	No	III	Wetland located on terrace above stream; drains toward stream but does not provide stream stabilization function
6	V-BE-AW-109	104.60	Benson	PEM/PSS/PFO	1P, 2P, 10P	a,b	yes	V-BE-AS-106	13605	Yes	II	Large wetland along stream outside of study area; saturated to surface; drainage channels; large feature
7	V-WH-AW-102	103.00	West Haven	PEM	1L, 2L	NA	No	No	1773	No	III	Emergent wetland in pasture (active or former, unclear)
7	V-WH-AW-103	103.30	West Haven	PEM	1P, 2P	a	No	V-WH-S-101	707	Yes	II	Emergent wetland in former pasture; drains to V-WH-S-101
7	V-BE-W-111	104.80	Benson	PEM	1L, 2L	NA	No	No	1995	No	III	Emergent wetland within active hay field (mowed previously)
7	V-BE-AW-111	104.80	Benson	PEM	1L, 2L	NA	No	No	4561	No	III	Emergent wetland within active hay field (mowed previously)
7	V-WH-W-103	105.20	West Haven	PEM	1P, 2P	a	No	V-WH-S-101	43	Yes	II	Emergent wetland in former pasture; drains to V-WH-S-101
7	V-WH-W-102	105.50	West Haven	PEM	1L, 2L	NA	No	No	352	No	III	Emergent wetland in pasture (active or former, unclear)
8	V-WH-AW-100	102.00	West Haven	PEM	1L, 2L	NA	No	No	894	No	III	Small emergent wetland between active agricultural fields
8	V-WH-AW-101	102.20	West Haven	PEM	1L, 2L	NA	No	No	1020	No	III	Small emergent wetland in pasture field
8	V-WH-W-101	105.90	West Haven	PEM	1L, 2L	NA	No	No	142	No	III	Small emergent wetland in pasture field
8	V-WH-W-100	105.90	West Haven	PEM	1L, 2L	NA	No	No	98	No	III	Small emergent wetland between active agricultural fields
8	V-WH-W-5	106.10	West Haven	PEM	1H, 2P	a	Yes	No	1455	Yes	II	Large wetland extends to mapped VSWI: wetland restoration project with plantings
8	V-WH-AW-5	106.10	West Haven	PEM	1H, 2P	a	Yes	No	5344	Yes	II	Large wetland extends to mapped VSWI: wetland restoration project with plantings
8	V-WH-W-6	106.20	West Haven	PEM	1H, 2P	a	Yes	No	116	Yes	II	Large wetland extends to mapped VSWI: wetland restoration project with plantings
8	V-WH-AW-6	106.20	West Haven	PEM	1H, 2P	a	Yes	No	688	Yes	II	Large wetland extends to mapped VSWI: wetland restoration project with plantings
8	V-WH-W-7	106.40	West Haven	PEM	1H, 2P	NA	No	No	146	No	III	Small swale wetland located in topographical depression
8	V-WH-AW-7	106.40	West Haven	PEM	1H, 2P	NA	No	No	786	No	III	Small swale wetland located in topographical depression
8	V-WH-W-8	106.50	West Haven	PEM	1H, 2P	a	No	No	6358	Yes	II	Large wetland extends outside of ROW; saturated to surface
8	V-WH-AW-8	106.50	West Haven	PEM	1H, 2P	a	No	No	44167	Yes	II	Large wetland extends outside of ROW; saturated to surface
8	V-WH-W-9	106.70	West Haven	PEM	1H, 2P	a	Yes	No	4785	Yes	II	Large wetland extends outside of ROW; saturated to surface
8	V-WH-AW-9	106.70	West Haven	PEM	1H, 2P	a	Yes	No	13887	Yes	II	Large wetland extends outside of ROW; saturated to surface
8	V-WH-W-10	106.80	West Haven	PEM	1P, 2P	a	No	No	1802	Yes	II	Wetland saturated to surface; drainage patterns
8	V-WH-AW-10	106.80	West Haven	PEM	1P, 2P	a	No	No	7146	Yes	II	Wetland saturated to surface; drainage patterns
9	V-WH-W-11	107.00	West Haven	PEM	1P, 2P, 4P	a	No	No	1219	Yes	II	Large wetland extends outside ROW; saturated to surface
9	V-WH-AW-11	107.00	West Haven	PEM	1P, 2P, 4P	a	No	No	8089	Yes	II	Large wetland extends outside ROW; saturated to surface
9	V-WH-W-13	107.40	West Haven	PEM/PSS	1P, 2P	a	No	No	6298	Yes	II	Wetland saturated to the surface; extends outside of study area; topographical depression along 22A
9	V-WH-AW-13	107.40	West Haven	PEM/PSS	1P, 2P	a	No	No	11263	Yes	II	Wetland saturated to the surface; extends outside of study area; topographical depression along 22A

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
9	V-WH-W-4	107.50	West Haven	PEM	1P, 2P	a	No	No	736	Yes	II	Wetland extends to larger feature outside of study area; saturated to the surface continues via culvert under local road
9	V-WH-AW-4	107.50	West Haven	PEM	1P, 2P	a	No	No	19397	Yes	II	Wetland extends to larger feature outside of study area; saturated to the surface continues via culvert under local road
9	V-WH-W-3	107.60	West Haven	PEM	1L, 2L	NA	No	No	1294	No	III	Wetland saturated to the surface; topographical depression along 22A
9	V-WH-AW-3	107.60	West Haven	PEM	1L, 2L	NA	No	No	1445	No	III	Wetland saturated to the surface; topographical depression along 22A
9	V-WH-W-2	107.70	West Haven	PEM	1L	NA	No	No	1349	No	III	Wetland saturated to the surface; topographical depression along 22A
9	V-WH-AW-14	107.70	West Haven	PEM	1L	NA	no	No	6918	No	III	Located in a field; saturated to the surface
9	V-WH-AW-2	107.70	West Haven	PEM	1L	NA	No	No	1051	No	III	Wetland saturated to the surface; topographical depression along 22A
9	V-WH-W-1	108.00	West Haven	PEM	1L	NA	No	No	426	No	III	Drains to V-WH-S-1 Under Road; Saturated to Surface
9	V-WH-AW-1	108.00	Fair Haven	PEM	1L	NA	No	No	496	No	III	Drains to V-WH-S-1 Under Road; Saturated to Surface
10	V-FH-W-27	108.30	Fair Haven	PEM	2L	NA	No	V-FH-S-25	462	No	III	Seep wetland; drains toward V-FH-S-25; saturated to surface; small feature
10	V-FH-AW-27	108.30	Fair Haven	PEM	2L	NA	No	V-FH-S-25	584	No	III	Seep wetland; drains toward V-FH-S-25; saturated to surface; small feature
10	V-FH-W-26	108.50	Fair Haven	PEM/PSS	1L	NA	No	No	223	No	III	Slight topographical depression along road; mowed field
10	V-FH-AW-26	108.50	Fair Haven	PEM/PSS	1L	NA	No	No	2630	No	III	Slight topographical depression along road; mowed field
10	V-FH-W-25	108.70	Fair Haven	PEM/PSS	1P, 2P	a	Yes	V-FH-S-24	1692	Yes	II	Depressional wetland feature; saturated to the surface; extends to mapped VSWI
10	V-FH-AW-25	108.70	Fair Haven	PEM/PSS	1P, 2P	a	Yes	V-FH-S-24	6233	Yes	II	Depressional wetland feature; saturated to the surface; extends to mapped VSWI
10	V-FH-W-24	108.80	Fair Haven	PEM	1P	NA	No	No	1012	No	III	Depressional wetland feature; saturated to surface
10	V-FH-AW-24	108.80	Fair Haven	PEM	1P	NA	No	No	4699	No	III	Depressional wetland feature; saturated to surface
10	V-FH-W-22	109.10	Fair Haven	PEM	1L	NA	No	No	1134	No	III	Small isolated feature in depression along 22a and driveway; saturated to the surface; partially mowed
10	V-FH-W-23	109.10	Fair Haven	PEM	1H, 2H	a	Yes	No	1997	Yes	II	Extends to mapped VSWI outside of study area; saturated to surface; partially mowed
10	V-FH-AW-23	109.10	Fair Haven	PEM	1H, 2H	a	Yes	No	5824	Yes	II	Extends to mapped VSWI outside of study area; saturated to surface; partially mowed
10	V-FH-W-21	109.30	Fair Haven	PEM/PSS	1H,2H,4P	a	Yes	V-FH-S-18	8777	Yes	II	Wetland drains across 22a via culvert; large mapped VSWI to the south of road
10	V-FH-AW-21	109.30	Fair Haven	PEM/PSS	1H,2H,4P	a	Yes	V-FH-S-18	13941	Yes	II	Wetland drains across 22a via culvert; large mapped VSWI to the south of road
11	V-FH-W-20	109.50	Fair Haven	PEM/PSS	1H, 2H, 4P, 10P	a, b	Yes	V-FH-S-16	10696	Yes	II	Wetland extends to larger mapped VSWI; drains across Route 22a
11	V-FH-W-19	109.60	Fair Haven	PEM	1H, 2H, 4P	a	Yes	No	9069	Yes	II	Wetland extends to topographical depression; ponded water
11	V-FH-AW-20	109.60	Fair Haven	PEM/PSS	1H, 2H, 4P, 10P	a, b	Yes	V-FH-S-16	21490	Yes	II	Wetland extends to larger mapped VSWI; drains across Route 22a
11	V-FH-AW-19	109.60	Fair Haven	PEM	1H, 2H, 4P	a	Yes	No	3445	Yes	II	Wetland extends to topographical depression; ponded water
11	V-FH-AW-18	109.80	Fair Haven	PEM/PFO	1P, 2P	a	No	No	2060	Yes	II	Wetland extends to larger feature outside of study area; topographical depression
11	V-FH-W-17	110.00	Fair Haven	PEM/PSS	1L	NA	No	V-FH-S-15	1429	No	III	Jurisdictional ditch drains from wetland
11	V-FH-W-16	110.00	Fair Haven	PEM	1L	NA	No	V-FH-S-15	1197	No	III	Jurisdictional ditch V-FH-S-15 drains to wetland
11	V-FH-AW-15	110.00	Fair Haven	PEM/PSS	1H,2H,4P,9P,10P	a,b	Yes	V-SH-S-13	20630	Yes	II	Large mapped VSWI; stream V-SH-S-13 drains through wetland
11	V-FH-AW-17	110.00	Fair Haven	PEM/PSS	1L	NA	No	V-FH-S-15	1121	No	III	Jurisdictional ditch drains from wetland
11	V-FH-AW-16	110.00	Fair Haven	PEM	1L	NA	No	V-FH-S-15	1813	No	III	Jurisdictional ditch V-FH-S-15 drains to wetland
11	V-FH-W-15	110.10	Fair Haven	PEM/PSS	1H,2H,4P,9P,10P	a,b	Yes	V-SH-S-13	10713	Yes	II	Large mapped VSWI; stream V-SH-S-13 drains through wetland
11	V-FH-W-29	110.20	Fair Haven	PEM / PSS	1L, 2L	NA	No	No	925	No	III	Small topographical depression wetland; saturated to surface
11	V-FH-W-12	110.30	Fair Haven	PEM / PSS	1P, 2P	a	Yes	V-FH-S-12	25324	Yes	II	Mapped VSWI; located between on ramp of Route 4 and Route 4
11	V-FH-AW-1	110.30	Fair Haven	PEM	1P, 2P	a	No	No	6769	Yes	II	Wetland in topographical depression; saturated to surface
11	V-FH-W-1	110.30	Fair Haven	PEM	1P, 2P	a	No	No	13621	Yes	II	Wetland in topographical depression; saturated to surface
11	V-FH-W-2	110.40	Fair Haven	PEM	1P, 2P, 10L	a	No	V-FH-S-3	2816	Yes	II	Wetland located along Route 4; topographical depression
12	V-FH-W-3	110.70	Fair Haven	PEM / PSS	1P, 2P, 3P	a	Yes	V-FH-S-4	2171	Yes	II	Mapped VSWI; saturated to surface; drainage patterns
12	V-FH-W-5	110.70	Fair Haven	PEM	1L, 2L	a	Yes	No	6285	Yes	II	Saturated to surface; drainage channels
12	V-FH-AW-3	110.70	Fair Haven	PEM / PSS	1P, 2P, 3P	a	Yes	V-FH-S-4	2153	Yes	II	Mapped VSWI; saturated to surface; drainage patterns
12	V-FH-AW-5	110.70	Fair Haven	PEM	1L, 2L	NA	Yes	No	1112	Yes	II	Saturated to surface; drainage channels
12	V-FH-AW-4	110.80	Fair Haven	PEM / PFO / PSS	1P, 2P, 4P	a	Yes	V-FH-S-5	12511	Yes	II	Large mapped VSWI; seepage wetland; saturated to surface; drainage channels; drains toward stream V-FH-S-5
12	V-FH-W-4	110.90	Fair Haven	PEM / PFO / PSS	1P, 2P, 4P	a	Yes	V-FH-S-5	85513	Yes	II	Large mapped VSWI; seepage wetland; saturated to surface; drainage channels; drains toward stream V-FH-S-5
12	V-FH-W-7	111.00	Fair Haven	PEM / PFO	1L, 2L	NA	No	No	2821	Yes	II	Small wetland; saturated to surface; depression
12	V-FH-W-6	111.00	Fair Haven	PEM	5.1, 5.2	NA	No	No	5315	No	III	Small wetland; saturated to surface; depression
12	V-FH-AW-28	111.00	Fair Haven	PEM	1P, 2P	a	No	V-FH-S-12	4581	Yes	II	Saturated to surface; extends to larger wetland outside of Study area; seep feature
12	V-FH-W-28	111.10	Fair Haven	PEM	1P, 2P	a	No	V-FH-S-12	6738	Yes	II	Saturated to surface; extends to larger wetland outside of Study area; seep feature
12	V-FH-W-8	111.10	Fair Haven	PEM / PSS / PFO	1P, 2P	a	No	No	10867	Yes	II	Wetland located in topographical depression; separated by off ramp
12	V-FH-AW-8	111.10	Fair Haven	PEM / PSS / PFO	1P, 2P	a	No	No	5370	Yes	II	Wetland located in topographical depression; separated by off ramp
12	V-FH-AW-9	111.40	Fair Haven	PEM / PSS	1H, 2H, 4H, 9P	a	Yes	V-FH-S-6	5125	Yes	II	Large mapped VSWI wetland; saturated to surface; drainage patterns
12	V-FH-W-9	111.50	Fair Haven	PEM / PSS	1H, 2H, 4H, 9P	a	Yes	V-FH-S-6	41636	Yes	II	Large mapped VSWI wetland; saturated to surface; drainage patterns
12	V-FH-W-13	111.60	Fair Haven	PEM / PSS / PFO	1L, 2L	NA	No	No	1840	No	III	Small wetland; topographical depression
13	V-FH-W-14	111.60	Fair Haven	PEM	1L, 2L	NA	No	No	1275	No	III	Small wetland; topographical depression
13	V-FH-W-10	111.70	Fair Haven	PEM	1P, 2P	a,b	Yes	V-FH-S-10	4404	Yes	II	Wetland in topographical depression; receives water from overland flow
13	V-FH-AW-10	111.70	Fair Haven	PEM	1P, 2P	a,b	Yes	V-FH-S-10	7209	Yes	II	Wetland in topographical depression; receives water from overland flow
13	V-CN-W-1a	112.30	Castleton	PEM/PSS	1P, 2P	a	No	No	3449	Yes	II	Wetland located in topographical depression; saturated to surface

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
13	V-CN-AW-1a	112.30	Castleton	PEM/PSS	1P, 2P	a	No	No	3619	Yes	II	Wetland located in topographical depression; saturated to surface
13	V-FH-W-11	112.40	Castleton	PEM	1P, 2P	a	No	V-FH-S-8	1748	Yes	II	Wetland saturated to surface; connects to larger wetland
13	V-CN-W-101	112.60	Castleton	PEM / OW / PSS / PFO	1H, 2H, 4P	a, b	No	No	46866	Yes	II	Large wetland located along Route 4; connected to Lake Bomoseen; topographical depression
13	V-CN-AW-101	112.60	Castleton	PEM / OW / PSS / PFO	1H, 2H, 4P	a, b	No	No	23661	Yes	II	Large wetland located along Route 4; connected to Lake Bomoseen; topographical depression
13	V-CN-W-105	112.70	Castleton	PEM / OW	1P, 2P, 10P	a	No	No	12751	Yes	II	Wetland separated by old wood road and connected by culvert; borders Lake Bomoseen. Vegetated shallow SAS.
13	V-CN-AW-105	112.60	Castleton	PEM / OW	1P, 2P, 10P	a	No	No	3693	Yes	II	Wetland separated by old wood road and connected by culvert; borders Lake Bomoseen
14	V-CN-W-106	112.90	Castleton	PEM / PSS / PFO	1P, 2P	a	Yes	No	5076	Yes	II	Wetland connects to mapped VSWI; saturated to surface; drainage patterns
14	V-CN-AW-106	112.90	Castleton	PEM / PSS / PFO	1P, 2P	a	Yes	No	2587	Yes	II	Wetland connects to mapped VSWI; saturated to surface; drainage patterns
14	V-CN-W-102	113.00	Castleton	PEM	1P, 2P, 10P	a	Yes	No	10401	Yes	II	Large mapped VSWI; topographical depression;
14	V-CN-AW-102	113.00	Castleton	PEM/PFO	1P, 2P, 10P	a	Yes	No	11413	Yes	II	Large mapped VSWI; topographical depression;
14	V-CN-W-107	113.30	Castleton	PEM	1L, 2L	NA	No	No	805	No	III	Small class III wetland along shallow ledge; receives water from a ground seep
14	V-CN-W-103	113.50	Castleton	PEM / PSS	1P, 2P	a	Yes	No	25934	Yes	II	Large mapped VSWI wetland; topographical depression; drains under Route 4 via culvert
14	V-CN-AW-103	113.50	Castleton	PEM / PSS	1P, 2P	a	Yes	No	10848	Yes	II	Large mapped VSWI wetland; topographical depression; drains under Route 4 via culvert
14	V-CN-W-104	113.70	Castleton	PFO / PEM / PSS	1P, 2P, 4P, 9P	a	Yes	No	119099	Yes	II	Large mapped VSWI wetland; drains under route 4 via culverts
14	V-CN-AW-104	113.70	Castleton	PFO / PEM / PSS	1P, 2P, 4P, 9P	a	Yes	No	87273	Yes	II	Large mapped VSWI wetland; drains under route 4 via culverts
15	V-CN-W-114	114.00	Castleton	PEM / PSS / PFO	1P, 2P	a	Yes	No	9104	Yes	II	Wetland located in topographical depression; seep wetland
15	V-CN-AW-114	114.00	Castleton	PEM / PSS / PFO	1P, 2P	a	Yes	No	4382	Yes	II	Wetland located in topographical depression; seep wetland
15	V-CN-W-113	114.20	Castleton	PEM / PSS / PFO	1P, 2P	a	Yes	No	30223	Yes	II	Large mapped VSWI complex; extends outside of study area; drains under Route 4
15	V-CN-W-112	114.20	Castleton	PEM / PSS	1P, 2P	a	Yes	No	7829	Yes	II	Located in topographical depression; extends to larger wetland
15	V-CN-AW-113	114.20	Castleton	PEM / PSS / PFO	1P, 2P	a	Yes	No	36754	Yes	II	Large mapped VSWI complex; extends outside of study area; drains under Route 4
15	V-CN-AW-112	114.20	Castleton	PEM / PSS	1P, 2P	a	Yes	No	2533	Yes	II	Located in topographical depression; extends to larger wetland
15	V-CN-W-111	114.40	Castleton	PEM / PFO	1P, 2P	a	No	No	22068	Yes	II	Located in topographical depression; drainage patterns
15	V-CN-W-115	114.50	Castleton	PEM	1P, 2P	a	No	No	17294	Yes	II	Wetland located in topographical depression; saturated to surface
15	V-CN-AW-115	114.50	Castleton	PEM	1P, 2P	a	No	No	6320	Yes	II	Wetland located in topographical depression; saturated to surface
15	V-CN-AW-111	114.40	Castleton	PEM / PFO	1P, 2P	a	No	No	7563	Yes	II	Located in topographical depression; drainage patterns
15	V-CN-W-110	114.60	Castleton	PEM / PFO	1P, 2P, 10P	a,b	No	V-CN-S-102	7140	Yes	II	Located in topographical depression; drains under Route 4
15	V-CN-AW-110	114.60	Castleton	PEM / PFO	1P, 2P, 10P	a,b	No	V-CN-S-102	5494	Yes	II	Located in topographical depression; drains under Route 4
15	V-CN-W-109	114.70	Castleton	PEM	1L, 2L	NA	No	No	1065	No	III	Small wetland feature; slight topographical depression
15	V-CN-W-116	114.70	Castleton	PEM, PSS, PFO	1P, 2P	a	No	No	1576	Yes	II	Large wetland saturated to the surface; topographical depression
15	V-CN-AW-116	114.70	Castleton	PEM, PSS, PFO	1P, 2P	a	No	No	6492	Yes	II	Large wetland saturated to the surface; topographical depression
15	V-CN-W-10	114.80	Castleton	PEM/PSS	1H, 2H, 4P	a	Yes	No	6752	Yes	II	Wetland surrounded by steep slopes; drains through culvert under Route 4; large mapped VSWI
15	V-CN-AW-10	114.80	Castleton	PEM/PSS	1H, 2H, 4P	a	Yes	No	10452	Yes	II	Wetland surrounded by steep slopes; drains through culvert under Route 4; large mapped VSWI
16	V-CN-W-15	115.5	Castleton	PEM/PSS	1P, 2P	a	Yes	No	21511	Yes	II	Wetland extends to VSWI; saturated to surface
16	V-CN-W-20	115.00	Castleton	PEM/PSS	1H, 2H	a	Yes	No	9441	Yes	II	Wetland located in topographical depression; extends to mapped VSWI; saturated to surface
16	V-CN-AW-20	115.00	Castleton	PEM/PSS	1H, 2H	a	Yes	No	9343	Yes	II	Wetland located in topographical depression; extends to mapped VSWI; saturated to surface
16	V-CN-AW-11	115.00	Castleton	PEM/PSS/PFO	1P, 2P	a	No	No	6520	Yes	II	Seep wetland; drains toward the east; extends into forested area
16	V-CN-W-11	115.10	Castleton	PEM/PSS/PFO	1P, 2P	a	No	No	5945	Yes	II	Seep wetland; drains toward the east; extends into forested area
16	V-CN-W-12	115.10	Castleton	PEM/PSS	1H, 2H,10P	a,b	Yes	V-CN-S-12; V-CN-S-11	12063	Yes	II	Large mapped VSWI; drains under Route 4 via culverts; saturated to surface; drainage patterns
16	V-CN-AW-12	115.10	Castleton	PEM/PSS	1H, 2H,10P	a,b	Yes	V-CN-S-12; V-CN-S-11	27225	Yes	II	Large mapped VSWI; drains under Route 4 via culverts; saturated to surface; drainage patterns
16	V-CN-W-13	115.20	Castleton	PEM	1P	NA	No	No	5963	No	III	Wetland receives water from man made pond and Route 4; saturated to surface
16	V-CN-AW-13	115.20	Castleton	PEM	1P	NA	No	No	2290	No	III	Wetland receives water from man made pond and Route 4; saturated to surface
16	V-CN-W-14	115.30	Castleton	PEM/PSS	1L, 2L	NA	No	No	1487	No	III	Wetland perched above stream; seep wetland feature
16	V-CN-AW-15	115.50	Castleton	PEM/PSS	1P, 2P	a	Yes	No	4540	Yes	II	Wetland extends to VSWI; saturated to surface
16	V-CN-W-21	115.60	Castleton	PEM	2L	NA	No	V-CN-S-14	1393	No	III	Small wetland; located in swale; minimal function; seep feature
16	V-CN-W-16	115.80	Castleton	PEM	1L, 2L	a	Yes	No	1507	Yes	II	Wetland overlaps mapped VSWI; topographical depression
16	V-CN-W-17	115.90	Castleton	PEM/PSS	1H, 2H, 4P, 9P, 10P	a,b	Yes	Castleton River (off ROW)	43996	Yes	II	Wetland extends to Castleton River; mapped VSWI; drainage patterns
17	V-CN-W-18	116.10	Castleton	PEM/PFO	1P, 2P, 4P	a,b	Yes	No	16474	Yes	II	Wetland mapped VSWI; topographical depression; surrounded by Route 4 and local roads
17	V-CN-W-19	116.10	Castleton	PEM/PSS	1P, 2P	a	Yes	No	19201	Yes	II	Mapped VSWI; saturated to surface; located between Route 4 and exit ramp
17	V-CN-AW-18	116.10	Castleton	PEM/PFO	1P, 2P, 4P	a,b	Yes	No	21670	Yes	II	Wetland mapped VSWI; topographical depression; surrounded by Route 4 and local roads
17	V-CN-W-5	116.30	Castleton	PEM	1L	h	Yes	No	1842	Yes	II	Mapped VSWI wetland; hydrologically connected to larger feature outside of ROW
17	V-CN-W-4	116.40	Castleton	PEM	2P	NA	No	No	1588	No	III	Drains toward stream; seep wetland feature
17	V-CN-W-3/6	116.50	Castleton	PEM/PSS	1H, 2H	a	No	V-CN-S-9	9904	Yes	II	Seep wetland; located in topographical depression; saturated to surface
17	V-CN-AW-3/6	116.50	Castleton	PEM/PSS	1H, 2H	a	No	V-CN-S-9	5682	Yes	II	Seep wetland; located in topographical depression; saturated to surface
17	V-CN-AW-4	116.40	Castleton	PEM	2P	NA	No	No	386	No	III	Drains toward stream; seep wetland feature
17	V-CN-AW-17	115.90	Castleton	PEM/PSS	1H, 2H, 4P, 9P, 10P	a,b	Yes	Castleton River (off ROW)	56327	Yes	II	Wetland extends to Castleton River; mapped VSWI; drainage patterns
17	V-CN-W-2	116.80	Castleton	PEM/PSS	2P	NA	No	V-CN-S-5	2059	No	III	Small wetland; seep feature; does not provide stream stabilization
17	V-CN-AW-2	116.80	Castleton	PEM/PSS	2P	NA	No	V-CN-S-5	1075	No	III	Small wetland; seep feature; does not provide stream stabilization

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
17	V-CN-W-7	117.00	Castleton	PEM/PSS	1L	NA	No	No	1872	No	III	Small wetland located in topographical depression
17	V-CN-AW-7	117.00	Castleton	PEM/PSS	1L	NA	No	No	4551	No	III	Small wetland located in topographical depression
18	V-CN-W-1	117.80	Castleton	PEM / PSS	1P, 2P	NA	No	No	12780	No	III	Wetland located in field; saturated to surface; slight topographical depression
18	V-CN-W-8	117.50	Castleton	PEM/PSS	1P, 2P	a	Yes	No	35105	Yes	II	Wetland located in topographical depression along railroad; hydrologically connected to larger mapped VSWI
18	V-CN-AW-8	117.50	Castleton	PEM/PSS	1P, 2P	a	Yes	No	64392	Yes	II	Wetland located in topographical depression along railroad; hydrologically connected to larger mapped VSWI
19	V-CN-W-9	119.00	Castleton	PEM/PSS	1H, 2P, 4P, 9P	a	Yes	No	9794	Yes	II	Wetland located in topographical depression along railroad; hydrologically connected to larger mapped VSWI
19	V-CN-AW-9	119.00	Castleton	PEM/PSS	1H, 2P, 4P, 9P	a	Yes	No	21394	Yes	II	Wetland located in topographical depression along railroad; hydrologically connected to larger mapped VSWI
20	T-IR-W1	119.70	Ira	PSS	1H, 2P, 4H, 9P, 10P	NA	Yes	No	14902	Yes	II	Part of VSWI mapped wetland. A depression between Rt. 4 and railroad tracks.
20	T-IR-AW-1	119.70	Ira	PSS	1H ,2H, 3H, 4H, 5P, 60,7P, 8P, 9H, 10P	c, g	Yes	No	17278	Yes	II	Extension of T-IR-W1 adjacent to railroad
20	T-IR-W2	120.10	Ira	PEM/PSS	1H ,2H, 3H, 4H, 5P, 6P ,7P, 8P, 9H, 10P	g c	Yes	T-IR-S2	38259	Yes	II	Large wetland at toe of slope; parallel to Rt. 4 bordering intermittent stream and draining to VSWI wetland complex and off-ROW stream.
21	T-WR-W9	120.50	West Rutland	PFO/PSS	1H, 2P, 4H, 9P	NA	Yes	No	1681	Yes	II	Located at the toe of the highway slope; bound by railroad tracks. Wetland is on the floodplain of the Castleton River.
21	T-WR-AW-9	120.50	West Rutland	PSS	1H, 2P, 4H, 9P	NA	Yes	No	12853	Yes	II	Extension of T-WR-W9, Large floodplain associated with Castleton River
21	T-WR-W7	120.60	West Rutland	PEM	2P	NA	No	No	1382	No	III	Small wetland depression; ditch-like.
21	T-WR-AW-13	120.90	West Rutland	PSS/PUB	1P, 2P	NA	Yes	No	6057	Yes	II	Large floodplain associated with Castleton River
21	T-WR-AW-12	120.90	West Rutland	PFO	2P	b	No	T-WR-AS-37	2686	Yes	II	Forested wetland within valley
21	T-WR-W10	121.00	West Rutland	PEM/PSS	10L	NA	Yes	No	1758	No	II	Small wetland at toe of highway slope. Hydrology primarily stormwater fed; restricted by railroad. Class II due to proximity to VSWI wetland, but not functionally significant due to the "Low" Function and Value rating.
21	T-WR-AW-10	121.00	West Rutland	PSS	10L	NA	Yes	No	2487	Yes	II	Small wetland at toe of highway slope. Hydrology primarily stormwater fed; restricted by railroad. Class II due to proximity to VSWI wetland, but not functionally significant due to the "Low" Function and Value rating.
21	T-IR-AW-2	120.10	Ira	PSS	1H ,2H, 3H, 4H, 5P, 60,7P, 8P, 9H, 10P	c g	Yes	T-IR-AS1	249955	Yes	II	Extension of T-IR-W2
21	T-WR-W8	120.30	West Rutland	PSS/PEM	2P	b	No	T-WR-S35	6721	No	III	Exits a larger forested wetland; drainage patterns; natural spring and seep flowing toward Rt. 4. Does not meet Class II, because associated stream is small in size and intermittent.
21	T-WR-W11	121.30	West Rutland	PSS	1H, 2P, 4H, 9P	NA	Yes	No	1394	Yes	II	PSS wetland bound by highway and railroad tracks; on the floodplain of the Castleton River.
22	T-WR-W5	122.30	West Rutland	PSS	2L	b	No	T-WR-S19	1451	No	III	Wetland bordering stream; atop cliff face. Does not meet Class II, because associated stream is small in size and intermittent.
22	T-WR-AW-11	121.40	West Rutland	PSS/PUB	1H, 2P, 4H, 9P	NA	Yes	No	32072	Yes	II	Extension of T-WR-W11, Large floodplain associated with Castleton River
23	T-WR-W6	122.80	West Rutland	PFO	2P, 4P	NA	Yes	No	3656	Yes	II	Sideslope seeps; drain into ponded quarry.
23	T-WR-AW-6	122.80	West Rutland	PFO/PUB	2P, 4P	g	Yes	No	15159	Yes	II	Extension of T-WR-W6, appears to be old quarry
23	T-WR-W4	123.50	West Rutland	PFO	1H, 3P, 4P	NA	Yes	No	12580	Yes	II	Wetland on floodplain; bordering am off-ROW stream; adjacent to agricultural field; within a VSWI wetland.
23	T-WR-W3	123.60	West Rutland	PSS	1P, 4P	NA	No	No	738	Yes	II	Isolated wetland; possibly excavated; on the Claredon River floodplain. Hydrology received from stormwater conveyance.
23	T-WR-AW-4	123.50	West Rutland	PFO	1H, 3P, 4P	NA	Yes	No	15722	Yes	II	Wetland on floodplain; bordering am off-ROW stream; adjacent to agricultural field; within a VSWI wetland.
24	T-WR-W2	124.30	West Rutland	PFO	2P, 6P	g b	No	T-WR-S6	17346	No	III	Forested wetland seep with three intermittent stream channels.
24	T-WR-AW-2	124.30	West Rutland	PFO	2P, 6P	g b	No	T-WR-S6	4736	No	III	Forested wetland seep
25	T-WR-W1	125.00	West Rutland	PEM/PFO	2P	NA	No	No	547	Yes	II	Small emergent wetland at toe of highway slope; on top of hill; drainage patterns present.
25	T-WR-AW-1	125.00	Rutland	PEM/PFO	2P	NA	No	No	11320	Yes	II	Small emergent wetland at toe of highway slope; on top of hill; drainage patterns present.
25	T-RU-W8	125.10	Rutland	PEM/PFO	2P	a	No	No	22593	No	III	Isolated wetland bound by Rt. 4; a forest; and agricultural field; with a forested seep.
25	T-RU-AW-8	125.10	Rutland	PEM/PFO	2P	a	No	No	9308	No	III	Isolated wetland bound by Rt. 4; a forest; and agricultural field; with a forested seep.
26	T-RU-W6	126.40	Rutland	PEM	NONE	NA	No	No	1845	No	III	Isolated wetland formed by culvert outflow; drains into horse pasture.
26	T-RU-W5	126.40	Rutland	PFO	1H	NA	Yes	No	5872	Yes	II	VSWI wetland on the Otter Creek floodplain. Otter Creek and storm drains provide hydrology.
26	T-RU-W7	126.40	Rutland	PEM	1H, 10L	NA	No	No	2080	Yes	II	Small PEM wetland on the floodplain of Otter Creek.
26	T-RU-AW-6	126.40	Rutland	PEM	NONE	NA	No	No	2498	No	III	Isolated wetland formed by culvert outflow; drains into horse pasture.
26	T-RU-AW-7	126.40	Rutland	PEM	1H, 10L	NA	No	No	2413	Yes	II	Small PEM wetland on the floodplain of Otter Creek.
26	T-RU-W3	126.70	Rutland	PFO/PEM	1H, 4P, 6P	g	Yes	No	7739	Yes	II	VSWI wetland; receives Otter Creek floodplain backwater.
26	T-RU-AW-3	126.70	Rutland	PFO/PEM	1H, 4P, 6P	g	Yes	No	8279	Yes	II	VSWI wetland; receives Otter Creek floodplain backwater.
26	T-RU-AW-5	126.40	Rutland	PFO	1H	NA	Yes	No	1104	Yes	II	VSWI wetland on the Otter Creek floodplain. Otter Creek and storm drains provide hydrology.
26	T-RU-AW-2	126.70	Rutland	PEM/PFO/PUB	1H, 2H, 4H, 6P, 9P	NA	Yes	No	92203	Yes	II	Large floodplain associated with Otter Creek
26	T-RU-W2	126.80	Rutland	PEM/PFO	1H, 2H, 4H, 6P, 9P	g	Yes	No	267591	Yes	II	Large wetland in VSWI parallel to Rt. 4; in the Otter Creek floodplain valley; intersected by railroad crossing.
26	T-RU-AW-4	126.80	Rutland	PEM/PSS	1H, 2H, 4H, 6P, 9P	g	Yes	No	147644	Yes	II	Large wetland in VSWI parallel to Rt. 4; bound by corn field to south; on the Otter Creek floodplain.
26	T-RU-W4	127.00	Rutland	PEM/PSS	1H, 2H, 4H, 6P, 9P	g	Yes	No	223762	Yes	II	Large wetland in VSWI parallel to Rt. 4; bound by corn field to south; on the Otter Creek floodplain.
27	T-RU-W9	NA	Rutland	PEM/PSS	1L, 2P, 4L	NA	No	T-RU-DITCH5	13925	No	III	Drainage patterns from dug ditch that channelizes parking lot runoff; wetland sloped/ditched and retains little floodwater.
27	T-RU-AW-9	NA	Rutland	PEM/PSS	1L, 2P, 4L	NA	No	T-RU-DITCH5	14664	No	III	Drainage patterns from dug ditch that channelizes parking lot runoff; wetland sloped/ditched and retains little floodwater.
27	T-RU-W1	127.50	Rutland	PEM/PSS	2P	b	No	T-RU-S1	15850	No	III	Small; dominated by Phragmites; stormwater structures drive hydrology. Does not meet Class II, because associated stream is small in size and intermittent.
27	T-RU-AW-1	127.50	Rutland	PEM/PSS	2P	b	No	T-RU-S1	30135	No	III	Small; dominated by Phragmites; stormwater structures drive hydrology. Does not meet Class II, because associated stream is small in size and intermittent.
27	T-CL-W14	127.80	Clarendon	PFO/PEM	1H, 2P	NA	No	No	5083	Yes	II	On the floodplain of the Cold River; adjacent to forest.
27	T-CL-AW-14	127.80	Clarendon	PFO/PEM	1H, 2P	NA	No	No	3537	Yes	II	On the floodplain of the Cold River; adjacent to forest.
27	T-CL-W13 NORTH	128.10	Clarendon	PEM/PSS	1H, 2P, 3P, 4P, 10P	NA	No	No	22078	Yes	II	Wetland surrounds a 3-ft.-wide stream which is a tributary to Otter Creek.
27	T-CL-AW-13	128.10	Clarendon	PEM/PSS	1H, 2P, 3P, 4P, 10P	NA	No	No	1332	Yes	II	Wetland surrounds a 3-ft.-wide stream which is a tributary to Otter Creek.
28	T-CL-W13 SOUTH	128.20	Clarendon	PEM	NONE	NA	No	No	2585	No	III	Small emergent depression which receives culvert outflow and drains into a stream.
28	T-CL-W12	128.40	Clarendon	PEM	2P	NA	No	No	1195	No	III	Small isolated wetland that drains from forest into culvert under road.
28	T-CL-AW-12	128.40	Clarendon	PFO	2P	NA	No	No	875	No	III	Small isolated wetland that drains from forest into culvert under road.
28	T-CL-W11	128.50	Clarendon	PFO	1P, 4P	NA	No	No	2335	No	III	Small isolated depression adjacent to forested upland.

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
28	T-CL-W8	128.80	Clarendon	PEM	2P, 4P, 9P	NA	Yes	No	11126	Yes	II	Wetland on a mowed hayfield adjacent to VSWI wetland; saturated to the surface.
28	T-CL-W7	128.90	Clarendon	PFO/PEM	1P, 2P, 4P	NA	Yes	No	11019	Yes	II	Wetland on both sides of the road; a swale on one side; a Phragmites stand on the other; saturated to the surface.
28	T-CL-AW-7	128.90	Clarendon	PFO	1P, 2P, 4P	NA	Yes	No	19367	Yes	II	Wetland on both sides of the road; a swale on one side; a Phragmites stand on the other; saturated to the surface.
28	T-CL-AW-8	128.80	Clarendon	PEM	2P, 4P, 9P	NA	Yes	No	9732	Yes	II	Wetland on a mowed hayfield adjacent to VSWI wetland; saturated to the surface.
28	T-CL-W6	129.10	Clarendon	PFO	2P	NA	No	No	1013	Yes	II	Isolated wetland with drainage patterns; forested swale that continues off-ROW.
28	T-CL-AW-6	129.10	Clarendon	PFO	2P	NA	No	No	3403	Yes	II	Isolated wetland with drainage patterns; forested swale that continues off-ROW.
28	T-CL-W5	#N/A	Clarendon	PEM	1P, 2P	NA	No	No	2698	No	III	Ditch-like swale adjacent to forested upland; flows into culvert; saturated to the surface.
28	T-CL-AW-5	#N/A	Clarendon	PEM	1P, 2P	NA	No	No	7300	No	III	Ditch-like swale adjacent to forested upland; flows into culvert; saturated to the surface.
29	T-CL-W4	129.40	Clarendon	PFO	1P, 2P	NA	No	No	1616	No	III	Forested roadside swale adjacent to forested upland; saturated to the surface.
29	T-CL-W3	129.40	Clarendon	PEM	1L, 2L, 10L	NA	No	No	673	No	III	Small wetland adjacent to large VSWI complex; drains median; disperses upland.
29	T-CL-AW-4	129.40	Clarendon	PFO	1P, 2P	NA	No	No	2400	No	III	Forested roadside swale adjacent to forested upland; saturated to the surface.
29	T-CL-W2	129.60	Clarendon	PFO/PEM	1L, 2P	NA	No	No	771	No	III	Small wetland adjacent to large VSWI complex; drains median; disperses on upland slope.
29	T-CL-W9	129.80	Clarendon	PEM	1P, 2P, 4P	NA	Yes	No	3599	Yes	II	An isolated flat basin near a forested area; saturated to the surface; inside VSWI wetland.
29	T-CL-AW-9	129.80	Clarendon	PEM	1P, 2P, 4P	NA	Yes	No	13737	Yes	II	An isolated flat basin near a forested area; saturated to the surface; inside VSWI wetland.
29	T-CL-W1	129.90	Clarendon	PEM	1L, 2L	NA	No	No	2549	No	III	Wetland adjacent to forest buffer along agricultural land; located under the VELCO ROW.
29	T-CL-W10	130.00	Clarendon	PSS	2P	NA	No	No	532	No	III	Isolated PEM wetland; mowed; saturated to the surface; hydrology created by stormwater drain.
29	T-CL-AW-2	129.50	Clarendon	PFO/PEM	1L, 2P	NA	No	No	126	No	III	Small wetland adjacent to large VSWI complex; drains median; disperses on upland slope.
29	T-CL-W15	130.30	Clarendon	PEM	2H, 4P,	NA	Yes	No	280	Yes	II	PEM wetland with drainage patterns; connects to large VSWI wetland complex.
29	T-CL-AW-15	130.30	Clarendon	PEM	2H, 4P	NA	Yes	No	8777	Yes	II	Large depressional Wetland
30	T-CL-AW-25	130.40	Clarendon	PEM	1P, 2P	NA	Yes	No	3366	Yes	II	Large depressional Wetland
30	T-CL-W16	130.50	Clarendon	PEM	2L	NA	No	No	630	No	III	Small wetland depression between two roads; dominated by Phragmites.
30	T-CL-AW-24	130.50	Clarendon	PEM	1P, 2P	NA	Yes	No	8655	Yes	II	Large depressional Wetland
30	T-CL-AW-16	130.50	Clarendon	PEM	2L	NA	No	No	1433	No	III	Small wetland depression between two roads; dominated by Phragmites.
30	T-CL-W17	130.60	Clarendon	PEM	2H, 4H	NA	Yes	No	1951	Yes	II	PEM depressional wetlands; hydrologically connected through culverts; connect to larger VSWI complex.
30	T-CL-AW-17	130.60	Clarendon	PEM/PFO	2H, 4H	NA	Yes	No	25141	Yes	II	Large wetland on both sides of Route 103
30	T-CL-W18	130.70	Clarendon	PFO	2H, 4H	b	Yes	T-CL-S9	905	Yes	II	Narrow forested wetland strip at road toe of slope; part of large VSWI complex.
30	T-CL-AW-18	130.70	Clarendon	PFO	2H, 4H	b	Yes	T-CL-S9	19407	Yes	II	Narrow forested wetland strip at road toe of slope; part of large VSWI complex.
30	T-CL-W19	131.00	Clarendon	PFO	4P	g	No	No	8174	Yes	II	Roadside forested wetland that extends off-ROW; no outlet.
30	T-CL-AW-19	131.00	Clarendon	PFO	4P	g	No	No	14181	Yes	II	Roadside forested wetland that extends off-ROW; no outlet.
30	T-CL-W20	131.20	Clarendon	PFO	4P, 9P	NA	No	No	2421	Yes	II	Forested wetlands on both sides of road; 10% slope; may connect to large VSWI wetland complex.
30	T-CL-AW-20	131.20	Clarendon	PFO	4P, 9P	NA	No	No	5736	Yes	II	Forested wetlands on both sides of road; 10% slope; may connect to large VSWI wetland complex.
30	T-CL-W21	131.30	Clarendon	PEM	1L, 2L	NA	No	No	1213	No	III	Isolated wetland in yard; dominated by Phragmites stand.
30	T-CL-AW-21	131.30	Clarendon	PEM	1L, 2L	NA	No	No	772	No	III	Isolated wetland in yard; dominated by Phragmites stand.
31	T-CL-W22	131.50	Clarendon	PEM	2P, 4H, 9P	NA	Yes	No	34153	Yes	II	PEM wetland at highway toe of slope; part of larger VSWI wetland complex/depression.
31	T-CL-AW-23	131.50	Clarendon	PFO	4P	NA	No	No	5569	No	III	Narrow forested roadside ditch.
31	T-CL-W23	131.60	Clarendon	PFO	4P	NA	No	No	16921	No	III	Narrow forested roadside ditch.
31	T-CL-AW-22	131.70	Clarendon	PEM	2P, 4H, 9P	NA	Yes	No	68423	Yes	II	PEM wetland at highway toe of slope; part of larger VSWI wetland complex/depression.
31	V-SH-AW-8	132.50	Shrewsbury	PEM/PSS	1P	NA	No	No	579	No	III	Small depressional wetland
31	V-SH-W-9	132.50	Shrewsbury	PEM/PSS	2L	NA	No	V-SH-S-17	91	No	III	Seep wetland drains toward stream V-SH-S-17
32	V-SH-AW-1a	133.20	Shrewsbury	PEM/PFO	1P, 2P	a	No	No	637	Yes	II	Wetland located in topographical depression; Potential Vernal Pool
33	V-SH-AW-7	133.80	Shrewsbury	PEM/PSS	2P	a	No	V-SH-S-11	9488	Yes	II	Wetland located on ledge; saturated to surface; drains to V-SH-S-11
33	V-SH-W-7	133.90	Shrewsbury	PEM/PSS	2P	a	No	V-SH-S-11	1692	Yes	II	Wetland located on ledge; saturated to surface; drains to V-SH-S-11
33	V-SH-W-6	NA	Shrewsbury	PEM	1P, 2P	NA	No	No	396	No	III	Depressional wetland; saturated to surface
33	V-SH-AW-6	NA	Shrewsbury	PEM	1P, 2P	NA	No	No	1563	No	III	Depressional wetland; saturated to surface
33	V-SH-AW-5	NA	Shrewsbury	PEM/PSS	1H, 2H, 10P	a, b	Yes	No	23804	Yes	II	Large mapped VSWI; saturated to surface; drainage patterns; located along stream V-SH-S-7 and V-SH-S-8
33	V-SH-W-5	NA	Shrewsbury	PEM/PSS	1H, 2H, 10P	a, b	Yes	No	4381	Yes	II	Large mapped VSWI; saturated to surface; drainage patterns; located along scream V-SH-S-7 and V-SH-S-8
33	V-SH-W-4	NA	Shrewsbury	PEM/PSS	1P	NA	No	No	1052	No	III	Small wetland; partially mowed; saturated to surface
33	T-SH-AW1	134.10	Shrewsbury	PFO	2P, 4P	a,b	Yes	No	7272	Yes	II	Large Forested complex
33	T-SH-W7	134.30	Shrewsbury	PFO	2L	NA	No	No	842	No	III	Isolated forested wetland
33	T-SH-AW7	134.30	Shrewsbury	PFO	2L	NA	No	No	2029	No	III	Isolated forested wetland
33	V-SH-AW-4	NA	Shrewsbury	PEM/PSS	1P	NA	No	No	1894	No	III	Small wetland; partially mowed; saturated to surface
33	V-SH-AW-201	134.1	Shrewsbury	PFO	1L, 2P,	b	No	T-SH-S1	5411	Yes	II	Fringe wetland to T-SH-S1; widens as slope flattens; adjacent modification from Railroad
33	V-SH-AW-202	134.3	Shrewsbury	PSS/PFO	2P	NA	No	No	679	No	III	Isolated feature; adjacent modifications from railroad; depressional area
33	T-SH-W2	134.60	Shrewsbury	PEM	2L, 8P	NA	No	No	1689	No	III	Cow Pasture
33	T-SH-AW2	134.60	Shrewsbury	PEM	2L, 8P	NA	No	No	4627	No	III	Cow Pasture
34	V-SH-AW-2a	NA	Shrewsbury	PEM/PFO	1P, 2P	a	no	V-SH-AS-6	989	Yes	II	Large feature in topographical depression; extends to river
34	V-SH-W-3	NA	Shrewsbury	PEM	1P	NA	No	No	163	No	III	Small depressional wetland; saturated to surface

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
34	V-SH-AW-3	NA	Shrewsbury	PEM	1P	NA	No	No	1101	No	III	Small depressional wetland; saturated to surface
34	V-SH-W-2	NA	Shrewsbury	PEM/PFO	1P, 2P	a	Yes	V-SH-S-3	850	Yes	II	Extends to mapped VSWI; located along mapped channel; topographical depression; floodplain feature
34	V-SH-AW-2	NA	Shrewsbury	PEM/PFO	1P, 2P	a	Yes	V-SH-S-3	19341	Yes	II	Extends to mapped VSWI; located along mapped channel; topographical depression; floodplain feature
34	V-SH-W-1	NA	Shrewsbury	PEM/PFO	1P	NA	No	No	444	No	III	Wetland located along steep slope; saturated to surface
34	T-SH-W3	135.00	Shrewsbury	PFO	1H, 4P, 10P	a,b	Yes	Mill River	2166	Yes	II	Large Forested Floodplain of Mill River
34	T-SH-AW3	135.00	Shrewsbury	PFO	1H, 4P, 10P	a,b	Yes	Mill River	10857	Yes	II	Large Forested Floodplain of Mill River
34	T-SH-W4	135.30	Shrewsbury	PFO	2L	NA	No	No	286	No	III	Isolated adjacent to Railroad
34	T-SH-AW4	135.30	Shrewsbury	PFO	2L	NA	No	No	454	No	III	Isolated adjacent to Railroad
34	T-SH-W6	135.40	Shrewsbury	PFO	2P	NA	No	No	1862	No	III	Isolated forested wetland
34	T-SH-AW6	135.40	Shrewsbury	PFO	2P	NA	No	No	6174	No	III	Isolated forested wetland
34	T-SH-W5	135.50	Shrewsbury	PEM	2L	NA	No	No	1577	No	III	Isolated in hayfield
34	T-SH-AW8	135.70	Shrewsbury	PSS	1P	b	Yes	T-SH-S5	4509	No	II	Associated with perennial stream
34	V-SH-AW-1	NA	Shrewsbury	PEM/PFO	1P	NA	No	No	2594	No	III	Wetland located along steep slope; saturated to surface
34	T-SH-W9	135.90	Shrewsbury	PFO	4P	a,b	Yes	T-SH-S6	9180	Yes	II	large seep with high amount of sedimentation/perennial stream
34	T-SH-AW9	135.90	Shrewsbury	PFO	4P	a,b	Yes	T-SH-S6	24841	Yes	II	large seep with high amount of sedimentation/perennial stream
34	T-SH-AW11	135.90	Shrewsbury	PSS	1L, 2P, 4L	a	No	No	19263	Yes	II	seep in bench cut for RR
35	V-WA-W-1	NA	Wallingford	PEM/PSS	1L	NA	No	V-WA-S-3	931	No	III	Drains under driveway; saturated to surface; steep slope
35	V-WA-AW-1	NA	Wallingford	PEM/PSS	1L	NA	No	V-WA-S-3	11334	Yes	II	Drains under driveway; saturated to surface; steep slope
35	V-WA-W-2	NA	Wallingford	PEM	1L	NA	No	No	154	No	III	Small wetland; saturated to surface; depression; mowed fringe
35	V-WA-AW-2	NA	Wallingford	PEM	1L	NA	No	No	2207	No	III	Small wetland; saturated to surface; depression; mowed fringe
35	V-WA-AW-3	NA	Wallingford	PEM	1H,2P,4P,10P	a, b	Yes	V-WA-S-4	5342	Yes	II	Wetland located along stream; saturated to surface extends to Mill River
35	V-WA-W-4	NA	Wallingford	PEM/PFO	1P	a	Yes	-	6	Yes	II	Located in topographical depression; extends to mapped VSWI
35	V-WA-AW-1a	NA	Wallingford	PEM/PFO	1P, 10 P	b	no	no	553	Yes	II	Located in depression; extends to river; saturated to the surface
35	T-SH-W10	135.90	Shrewsbury	PFO	1L, 2P, 4L	a,b	No	T-SH-S7	4001	Yes	II	Hillside seep with drainage patterns
35	T-SH-AW10	135.90	Shrewsbury	PFO	1L, 2P, 4L	a,b	No	T-SH-S7	8050	Yes	II	Hillside seep with drainage patterns
35	T-SH-W11	135.90	Shrewsbury	PSS	1L, 2P, 4L	a	No	No	1888	Yes	II	seep in bench cut for RR
35	T-SH-W12	136.00	Shrewsbury	PEM	2L	NA	No	No	770	No	III	
35	T-SH-W13	136.60	Wallingford	PSS	1P, 2P, 4P	a	Yes	No	11760	Yes	II	forested wetland abutting RR both side of RR
35	T-SH-AW13	136.60	Wallingford	PSS	1P, 2P, 4P	a	Yes	No	36953	Yes	II	forested wetland abutting RR both side of RR
35	T-WA-W2	136.70	Wallingford	PEM	1P, 2P, 4P, 10P	a, c	No	T-WA-S1	627	Yes	II	large seep drains to perennial stream
35	T-WA-AW2	136.70	Wallingford	PEM	1P, 2P, 4P, 10P	a, c	No	T-WA-S1	1109	Yes	II	large seep drains to perennial stream
35	T-WA-W1	136.70	Wallingford	PEM	1L, 2L	a	No	No	189	Yes	II	small seep drains to perennial stream
35	T-WA-AW1	136.70	Wallingford	PEM	1L, 2L	a	No	No	286	Yes	II	small seep drains to perennial stream
35	V-WA-AW-4	NA	Wallingford	PEM/PFO	1P	a	Yes	No	7502	Yes	II	Located in topographical depression; extends to mapped VSWI
35	T-WA-W3	137.00	Wallingford	PFO	1P, 2P, 4L	a, b	No	T-WA-S2	22153	No	III	large marginal wetland along RR bank and managed forest area
36	V-WA-W-5	NA	Wallingford	PEM	1P	NA	No	V-WA-S-6	695	No	III	Drains to V-WA-S6; topographical depression along road
36	V-WA-AW-106	137.60	Wallingford	PSS	1P, 2H, 10P	b	No	V-WA-S-103	7158	Yes	II	Scrub-shrub wetland adjacent to V-WA-S-103
36	V-WA-W-105	137.70	Wallingford	PSS/ PFO	1P, 2P	b	No	V-WA-S-103	6	Yes	II	Scrub-shrub wetland adjacent to V-WA-S-103
36	V-WA-AW-105	137.70	Wallingford	PSS/ PFO	1P, 2P	b	No	V-WA-S-103	8636	Yes	II	Scrub-shrub wetland adjacent to V-WA-S-103
36	V-WA-AW-104	137.70	Wallingford	PSS	1L, 2L	NA	No	V-WA-S-105	1745	No	III	Scrub-shrub wetland; adjacent to V-WA-S-104
36	V-WA-W-103	137.80	Wallingford	PSS	1L, 2L	NA	No	V-WA-S-103	597	No	III	Small scrub shrub wetland; drained by V-WA-S-103
36	V-WA-W-102	137.80	Wallingford	PEM/ PSS	1L, 2L	NA	No	No	64	No	III	Emergent wetland (scrub shrub out side of study area) drains to culvert under Rt 103
36	V-WA-AW-102	137.80	Wallingford	PEM/ PSS	1L, 2L	NA	No	No	3469	No	III	Emergent wetland (scrub shrub out side of study area) drains to culvert under Rt 103
36	V-WA-AW-103	137.80	Wallingford	PSS	1L, 2L	NA	No	V-WA-S-103	5085	No	III	Small scrub shrub wetland; drained by V-WA-S-103
36	T-WA-W4	137.00	Wallingford	PFO	1L, 2P, 10P	a, b	No	T-WA-S3, T-WA-S4	8624	Yes	II	multiple intermittent/ephemeral drainages up slope drain to wetland
36	T-WA-AW4	137.00	Wallingford	PFO	1L, 2P, 10P	a, b	No	T-WA-S3, T-WA-S4	16102	Yes	II	multiple in/eph drainages up slope drain to wetland
36	T-WA-W5	137.10	Wallingford	PFO	2L, 10L	NA	No	No	1639	No	III	marginal forested wetland along rock wall
36	T-WA-AW5	137.10	Wallingford	PFO	2L, 10L	NA	No	No	5871	No	III	marginal forested wetland along rock wall
36	T-WA-W6	137.10	Wallingford	PFO	2L	NA	No	No	1295	No	III	isolated hillside seep
36	T-WA-AW6	137.10	Wallingford	PFO	2L	NA	No	No	1953	No	III	isolated hillside seep
36	T-WA-W7	137.20	Wallingford	PSS	2L	NA	No	No	452	No	III	isolated hillside seep
36	T-WA-W8	137.20	Wallingford	PEM	2P, 10L	NA	No	No	2044	No	III	isolated hillside seep in T-line ROW
36	T-WA-W9	137.30	Wallingford	PEM	1L, 2P, 10L	c	No	T-WA-S6	1272	Yes	II	seep associated with int stream
36	T-WA-AW10	137.30	Wallingford	PEM	2P, 1L	NA	No	No	273	Yes	II	isolated hillslope seep
36	V-WA-AW-5	R137.5	Wallingford	PEM	1P	NA	No	V-WA-S-6	5016	Yes	II	Drains to V-WA-S6; topographical depression along road
36	T-WA-W10	137.30	Wallingford	PEM	2P, 1L	NA	No	No	1053	Yes	II	Isolated hillslope seep
36	T-WA-AW3	137.00	Wallingford	PFO/PEM	1P, 2P, 4L	a, b	No	T-WA-S2	22933	No	III	large marginal wetland along RR bank and managed forest area

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
37	V-WA-W-101	138.20	Wallingford	PEM/ PFO	1P, 2H, 10P	b	No	No	2304	Yes	II	Emergent/ forested wetland adjacent to stream located outside of study area
37	V-WA-AW-101	138.30	Wallingford	PEM/PSS	1P, 2H, 10P	b	No	No	35797	Yes	II	Emergent/ forested wetland adjacent to stream located outside of study area
37	V-WA-AW-100	138.40	Wallingford	PSS/ PEM	1P, 2P	b	No	No	7018	Yes	II	Scrub-shrub wetland; receives flow from stormwater culvert
37	T-MH-W55	138.50	Mount Holly	PSS	1P, 2P, 4P	b	No	V-MH-S-100	554	Yes	II	PSS wetlands on both sides of road; drainage patterns.
37	T-MH-AW-55	138.50	Mount Holly	PEM/PFO	1P, 2P, 4P	b	No	T-MH-S39	22005	Yes	II	Fields north of Route 103, Forested to the south
37	T-MH-W56	138.70	Mount Holly	PEM	1L, 2L, 4L	NA	Yes	T-MH-DITCH18	538	No	II	Wetland drainage to jurisdictional ditch; at the bottom of a sloped and mowed lawn; part of VSWI wetland. Class II due to proximity to VSWI wetland, but not functionally significant due to the "Low" Function and Value rating.
37	T-MH-AW-56	138.70	Mount Holly	PEM/PUB	1L, 2L, 4L	NA	Yes	No	2627	Yes	II	Includes farm pond in residential area
37	T-MH-W53 NORTH	138.90	Mount Holly	PFO	1P, 2P, 3P, 4P	NA	No	T-MH-DITCH17	229	Yes	II	Forested hillslope; drains to jurisdictional ditch.
37	T-MH-AW-53	138.90	Mount Holly	PFO	1P, 2P, 3P, 4P	b	Yes	T-MH-S-38	15892	Yes	II	Forested on both sides of Route 103
37	T-MH-W54	139.00	Mount Holly	PEM	2L, 4L	NA	No	T-MH-DITCH-17	633	No	III	Small wetland on a hillslope seep; drains to jurisdictional ditch.
37	T-MH-AW-74	139.10	Mount Holly	PUB	1P,2P,3P,4P	NA	Yes	No	2690	Yes	II	Man-made pond
37	T-MH-W50	139.10	Mount Holly	PEM/PSS	1P, 2P, 3P, 4P	NA	No	T-MH-DITCH15	5385	No	III	Wetland drains to jurisdictional ditch.
37	T-MH-AW-50	139.10	Mount Holly	PFO	1P, 2P, 3P, 4P	NA	No	No	20695	No	III	Wetland drains to jurisdictional ditch.
37	T-MH-AW-49	139.10	Mount Holly	PEM	1P, 2P, 3P, 4P	c	Yes	T-MH-S36	4052	Yes	II	Small PEM wetland; drains to VSWI wetland complex via ephemeral stream.
37	T-MH-W48 NORTH	139.20	Mount Holly	PEM	2L, 4L	NA	No	No	131	No	III	Very small PEM wetland on both sides of road; drains to VSWI complex.
37	T-MH-W51	139.30	Mount Holly	PSS	1L, 2L, 4L	NA	No	No	294	No	III	Small isolated wetland that drains through a culvert to a small stream.
37	T-MH-AW-51	139.30	Mount Holly	PFO/PSS	1L, 2L, 4L	NA	No	No	2380	No	III	Within transmission corridor
37	T-MH-AW-48	139.20	Mount Holly	PEM	2L, 4L	NA	Yes	No	534	Yes	II	Very small PEM wetland on both sides of road; drains to VSWI complex.
38	T-MH-W52	139.40	Mount Holly	PEM	1L, 2P, 4L	NA	No	T-MH-DITCH-16	2137	No	III	PEM wetland that drains to jurisdictional ditch which drains through a culvert to a small stream.
38	T-MH-AW-52	139.40	Mount Holly	PFO/PSS	1L, 2P, 4L	NA	No	No	9649	No	III	Within transmission corridor
38	T-MH-AW-73	139.50	Mount Holly	PEM	1P,2P,3P,4L	NA	No	No	1532	Yes	II	Edge of large wet hayfield
38	T-MH-W46	139.60	Mount Holly	PEM	1L, 3L, 4L	c	No	T-MH-S-32	0	No	III	Intermittent stream flows through; drains under road to VSWI wetland complex. Does not meet Class II, because associated stream is small in size and intermittent.
38	T-MH-AW-46	139.60	Mount Holly	PFO/PEM	1L, 3L, 4L	c	No	T-MH-S-32	800	No	III	Drainage swale between residential housing
38	T-MH-W45	139.80	Mount Holly	PSS/PEM	1P, 2L, 4P	NA	No	No	8461	Yes	II	PSS wetland along road; drains to VSWI wetland.
38	T-MH-W44	139.90	Mount Holly	PFO	1L, 2L	NA	No	No	457	Yes	II	Roadside marginal forest wetland; higher elevation; gradually sloped; drains into VSWI wetland.
38	T-MH-W43	139.90	Mount Holly	PSS	2P, 4L	NA	No	No	62	Yes	II	PSS wetland along road; drains to VSWI wetland.
38	T-MH-AW-44	139.90	Mount Holly	PFO	1L, 2L	NA	No	No	11923	Yes	II	drains into Stream T-MH-S31
38	T-MH-AW-43	139.90	Mount Holly	PSS	2P, 4L	NA	No	No	2622	Yes	II	PSS wetland along road; drains to VSWI wetland.
38	T-MH-W41	140.10	Mount Holly	PEM	1P, 2P, 3L	NA	No	No	2513	Yes	II	Marginal roadside PEM wetlands on both sides of road; southern section drains to VSWI wetland.
38	T-MH-AW-41	140.10	Mount Holly	PEM	1P, 2P, 3L	NA	No	No	16844	Yes	II	Marginal roadside PEM wetlands on both sides of road; southern section drains to VSWI wetland.
38	T-MH-AW-42	140.10	Mount Holly	PSS	1P, 2P, 3P, 4L	NA	No	No	1024	Yes	II	Very small isolated wetland; signs of shallow flooding; perhaps from S-28
38	T-MH-AW-45	139.80	Mount Holly	PSS/PEM	1P, 2L, 4P	NA	No	No	13567	Yes	II	PSS wetland along road; drains to VSWI wetland.
38	T-MH-W38	140.30	Mount Holly	PSS/PFO	1H, 2P, 4P	NA	No	T-MH-DITCH11	1060	No	II	Wetlands on both sides of Rt. 103; comprise the northern boundary of a larger wetland complex; comprised of forest and lawn.
38	T-MH-AW-38	140.30	Mount Holly	PFO	1H, 2P, 4P	NA	No	No	18202	Yes	II	Large Forested complex
38	T-MH-W37	140.40	Mount Holly	PSS	1H, 2P, 3P, 4P	b	No	T-MH-S27	442	Yes	II	PSS wetland on both sides of highway; encompasses ephemeral stream
39	T-MH-W36	140.50	Mount Holly	PSS	1L, 2L, 4L	NA	No	T-MH-DITCH-10	904	No	III	Forested sideslope seep; drainage patterns from roadside ditch.
39	T-MH-W35 NORTH	140.70	Mount Holly	PSS	2L, 4L	NA	No	No	128	No	III	Very small isolated wetland on north side of road; drainage patterns; forested hillslope.
39	T-MH-W34	140.70	Mount Holly	PSS	1L, 2L, 4L	NA	No	No	358	No	III	Very small isolated PSS wetland.
39	T-MH-AW-35	140.70	Mount Holly	PFO	2L, 4L	NA	Yes	No	804	Yes	II	drains into VSWI wetland
39	T-MH-AW-34	140.70	Mount Holly	PFO	1L, 2L, 4L	NA	No	No	441	No	III	Small isolated wetland
39	T-MH-W33	140.80	Mount Holly	PSS	1L, 2P, 4P	NA	No	No	953	Yes	II	Roadside wetland; PEM/PSS; drainage patterns present; south section borders VSWI wetland.
39	T-MH-AW-33	140.80	Mount Holly	PFO	1L, 2P, 4P	NA	Yes	No	11019	Yes	II	drains into VSWI wetland
39	T-MH-W32	140.90	Mount Holly	PEM	1L, 2P, 4L	c	No	T-MH-S-25	565	No	III	PEM wetland on both sides of road; surrounds intermittent stream which drains south under road.
39	T-MH-W31	140.90	Mount Holly	PEM	1L, 2L, 4L	NA	No	No	966	No	III	Wetland seep (man-made from road cut); naturalized.
39	T-MH-AW-32	140.90	Mount Holly	PSS/PEM	1L, 2P, 4L	c	No	T-MH-S-25	6432	No	III	old field
39	T-MH-W30	141.00	Mount Holly	PEM	1L, 2P, 4L	NA	No	No	302	No	III	Depressional area receiving water from culvert upslope; drains to ditch; lawn to north; floodplain to south.
39	T-MH-AW-30	141.00	Mount Holly	PSS/PEM	1L, 2P, 4L	NA	No	No	4866	No	III	old field
39	T-MH-AW-29	141.00	Mount Holly	PEM	1L, 2L, 4L	NA	No	No	1029	No	III	Very small PEM wetland; bound by road and non-jurisdictional ditch.
39	T-MH-AW-36	140.40	Mount Holly	PSS	1L, 2L, 4L	NA	No	T-MH-DITCH-10	215	No	III	Forested sideslope seep; drainage patterns from roadside ditch.
39	T-MH-AW-39	140.60	Mount Holly	PFO/PUB	1H, 2L, 4L	NA	Yes	No	19553	Yes	II	Large Forested complex
39	T-MH-AW-37	140.40	Mount Holly	PSS	1H, 2P, 3P, 4P	B	No	T-MH-S27	150	No	III	Small PSS wetland on both sides of highway; encompasses ephemeral stream. Does not meet Class II, because associated stream is small in size and ephemeral.
40	T-MH-W26	141.60	Mount Holly	PEM	1L, 2L	NA	No	No	2891	No	III	A PEM wetland; saturated to the surface; includes stream in eastern portion.
40	T-MH-W25	141.80	Mount Holly	PEM	1L, 2L	NA	No	No	913	No	III	Narrow PEM wetlands on both sides of Rt. 103; bound by railroad tracks on south side.
40	T-MH-W24	142.00	Mount Holly	PSS	1P, 2L, 5P, 6P	g b	No	T-MH-S-41	886	No	III	PSS wetlands on both sides of Rt. 103; bound by railroad tracks on south side; intermittent stream on south side.
40	T-MH-AW-24	142.00	Mount Holly	PFO	1P, 2L	NA	No	No	9697	Yes	III	Extends under transmission corridor
40	T-MH-W23	142.20	Mount Holly	PEM/PSS	1P	NA	Yes	No	220	Yes	II	Wetlands on both sides of Rt. 103; bound by railroad tracks and PEM on south side; PSS on north side with drainage patterns.
40	T-MH-AW-23	142.20	Mount Holly	PEM/PSS	1P	NA	Yes	No	12490	Yes	II	Wetlands on both sides of Rt. 103; bound by railroad tracks and PEM on south side; PSS on north side with drainage patterns.

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
40	T-MH-AW-22	142.20	Mount Holly	PSS	1P, 2L, 10P	B	No	T-MH-S-21	234	No	III	Very small; wetland fringe associated with S-21; intermittent stream; between railroad tracks and Rt. 103.
40	T-MH-AW-25	141.70	Mount Holly	PEM	1L, 2L	NA	No	No	6621	No	III	Narrow PEM wetlands on both sides of Rt. 103; bound by railroad tracks on south side.
40	T-MH-W28	141.30	Mount Holly	PSS	1H, 2H, 10P	NA	Yes	No	4741	Yes	II	Wetland on both sides of highway; saturated to the surface; bound by railroad tracks on the south side; connects to large wet field on north side; connects to VSWI wetland off-ROW.
40	T-MH-AW-28	141.30	Mount Holly	PSS	1H, 2H, 4L, 10P	NA	Yes	No	17996	Yes	II	old field
40	T-MH-AW-69	141.30	Mount Holly	PSS	1H,2H,3H,4H,9H	NA	Yes	No	99	Yes	II	Large Floodplain wetland
40	T-MH-AW-70	141.40	Mount Holly	PSS	1L,2L,,4L	NA	Yes	No	7852	No	III	Small wetland adjacent to Railroad
40	T-MH-W27	141.50	Mount Holly	PEM/PSS	1L	NA	No	No	93	No	III	Small isolated wetland near roadside; storm drain within; saturated to surface.
40	T-MH-AW-26	141.60	Mount Holly	PEM	1L, 2L	NA	No	No	11635	No	III	A PEM wetland; saturated to the surface; includes stream in eastern portion.
40	T-MH-AW-27	141.40	Mount Holly	PEM/PSS	1L	NA	No	No	259	No	III	Small isolated wetland near roadside; storm drain within; saturated to surface.
41	T-MH-AW-67	143.00	Mount Holly	PFO	1L, 2P, 4L	NA	No	No	1695	No	III	Small isolated wetland
41	T-MH-AW-65	143.30	Mount Holly	PFO	1P, 2L, 4L	c	No	T-MH-AS42	3228	No	III	Small isolated wetland
41	T-MH-AW-66	143.30	Mount Holly	PFO	1P, 2L, 4L	c	No	T-MH-AS-42	4579	No	III	Small isolated wetland
41	T-MH-AW-64	143.40	Mount Holly	PFO	1P, 2L, 4L, 10P	b	No	T-MH-AS-43	3950	No	III	Small isolated wetland
41	T-MH-W21	142.40	Mount Holly	PSS	1P, 2L	NA	No	No	2519	No	III	Roadside PSS wetland; split by driveway; saturated to surface.
41	T-MH-W20	142.50	Mount Holly	PEM/PSS	1P, 2L	NA	No	No	1178	No	III	Wetland on both sides of Rt. 103; drains from north to south and collects in depression at railroad boundary.
41	T-MH-AW-20	142.50	Mount Holly	PEM/PSS	1P, 2L	NA	No	No	3395	No	III	Wetland on both sides of Rt. 103; drains from north to south and collects in depression at railroad boundary.
41	T-MH-AW-21	142.40	Mount Holly	PSS	1P, 2L	NA	No	No	430	No	III	Roadside PSS wetland; split by driveway; saturated to surface.
41	T-MH-AW-63	143.40	Mount Holly	PFO/PSS	1H, 2H, 4L	NA	Yes	No	4405	Yes	II	Large Beaver influenced wetland
42	T-MH-W18	143.70	Mount Holly	PSS	1P, 2L, 4L, 5P, 6P	g	Yes	No	5590	Yes	II	Wetland in depression; bound by Rt. 103 and driveways on either side; drains to jurisdictional ditch.
42	T-MH-AW-18	143.70	Mount Holly	PFO	1H, 2P, 4L, 5P, 6P	g	Yes	No	12808	Yes	II	Mapped VSWI
42	T-MH-W16	143.90	Mount Holly	PEM	1P, 2P, 4L	NA	No	T-MH-DITCH-6	6571	No	III	PEM wetland; drains to jurisdictional ditch; saturated to the surface.
42	T-MH-W14	143.90	Mount Holly	PSS	1L	NA	No	T-MH-DITCH5	816	No	III	Overlaps VSWI wetland; jurisdictional ditch enters wetland from west.
42	T-MH-AW-16	143.90	Mount Holly	PFO	1P, 2P, 4L	NA	No	T-MH-DITCH-6	12927	No	III	PEM wetland; drains to jurisdictional ditch; saturated to the surface.
42	T-MH-W12	144.00	Mount Holly	PFO	1H, 2L, 4P	b	No	T-MH-S-18	254	No	III	Wetland within stream overflow area; saturated to the surface.
42	T-MH-W11	144.10	Mount Holly	PSS	1P, 2L	b	Yes	T-MH-S-17	31	Yes	II	Saturated to the surface; drainage patterns; surrounds an ephemeral stream which connects to a VSWI wetland.
42	T-MH-W10	144.10	Mount Holly	PSS/PEM	1P, 2P, 4L	NA	No	No	1599	No	III	Saturated to the surface; near an off-ROW stream; borderline hydric vegetation.
42	T-MH-AW-11	144.10	Mount Holly	PFO	1P, 2L	b	Yes	T-MH-S-17	3265	Yes	II	Mapped VSWI
42	T-MH-W8	144.20	Mount Holly	PSS	1P, 2P, 4L	NA	No	T-MH-DITCH-3	472	No	III	Saturated to the surface; located below transmission lines; culvert drains wetland under highway.
42	T-MH-W9	144.30	Mount Holly	PSS	1P, 2P, 4P	b	Yes	T-MH-S-16	1058	Yes	II	Wetland saturated to the surface; borders intermittent stream on south side; borders non-jurisdictional ditch to the north; connects to a VSWI wetland.
42	T-MH-AW-9	144.30	Mount Holly	PSS	1P, 2P, 4P	NA	Yes	No	16367	Yes	II	large Mapped VSWI
42	T-MH-AW-62	144.40	Mount Holly	PFO	1P, 2P	b	Yes	T-MH-S-15	5853	Yes	II	Small isolated wetland
42	T-MH-AW-61	144.50	Mount Holly	PFO	1P, 2P	b	Yes	T-MH-S-15	3272	Yes	II	Small isolated wetland
42	T-MH-AW-8	144.10	Mount Holly	PSS	1P, 2P, 4L	NA	No	T-MH-DITCH-3	1534	No	III	Saturated to the surface; located below transmission lines; culvert drains wetland under highway.
42	T-MH-AW-10	144.10	Mount Holly	PSS/PEM	1P, 2P, 4L	NA	No	No	610	No	III	Saturated to the surface; near an off-ROW stream; borderline hydric vegetation.
42	T-MH-AW-13	144.00	Mount Holly	PSS	1L	NA	No	No	544	No	III	PSS receives water from non-jurisdictional ditch; wetland drains under Rt. 103.
42	T-MH-AW-19	143.60	Mount Holly	PSS	1P, 2P, 4L, 5P, 6P	NA	No	No	3318	No	III	Wetland in depression below forest; bound by Rt. 103 and driveways on either side.
42	T-MH-AW-12	144.00	Mount Holly	PFO	1H, 2L, 4P	B	No	T-MH-S-18	264	No	III	Wetland within stream overflow area; saturated to the surface.
42	T-MH-AW-14	143.80	Mount Holly	PSS	1L	NA	No	T-MH-DITCH-5	85	No	III	Overlaps VSWI wetland; jurisdictional ditch enters wetland from west.
42	T-MH-W17	143.70	Mount Holly	PEM	1P, 2L	NA	No	No	3419	No	III	PEM wetland; saturated to the surface; overlaps VSWI wetland; ditch-like characteristics.
42	T-MH-AW-17	143.60	Mount Holly	PEM	1P, 2L	NA	No	No	1401	No	III	PEM wetland; saturated to the surface; overlaps VSWI wetland; ditch-like characteristics.
42	T-MH-W7	144.30	Mount Holly	PSS	1P, 2L, 4L, 10L	b	Yes	T-MH-S15	516	Yes	II	Narrow PSS wetland parallel to road; saturated to the surface; hydrologically connected by intermittent stream S15.
42	T-MH-W6	144.70	Mount Holly	PSS	1P, 2L	NA	No	No	107	No	III	Saturated to surface; drains to jurisdictional ditch to east.
42	T-MH-AW-6	144.70	Mount Holly	PFO	1L, 2L	NA	No	No	12501	No	III	forested wetland swale
42	T-MH-AW-7	144.30	Mount Holly	PSS	1P, 2L, 4L, 10L	B	Yes	T-MH-S15	7812	Yes	III	Narrow PSS wetland parallel to road; saturated to the surface; hydrologically connected by intermittent stream S15.
43	T-MH-W4	145.10	Mount Holly	PSS	1L, 2L, 4L, 10P	b	Yes	T-MH-S-10	414	Yes	II	Drainage patterns present; borders Branch Brook.
43	T-MH-AW-60	145.30	Mount Holly	PSS	1P,2P,3P,4P	NA	No	No	3694	Yes	II	floodplain of Stream T-MH-S10
43	T-MH-AW-5	145.0	Mount Holly	PSS	1P, 2L	NA	Yes	No	5912	Yes	II	PSS area adjacent to Branch Brook; connects to VSWI wetland.
43	T-MH-AW-4	145.10	Mount Holly	PSS	1L, 2L, 4L, 10P	B	Yes	T-MH-S-10	164	Yes	II	Drainage patterns present; borders Branch Brook.
44	T-MH-AW-1	145.80	Mount Holly	PFO	1L, 2L, 4L	b	No	T-MH-S-3	660	No	III	small floodplain of Stream T-MH-AS-3

TDI New England Clean Power Link (NECPL)												
Natural Resource Map Series Page Number	Wetland ID a/	Mile Post b/	Town	Cowardin Classification c/	VWR Section 5 Functional Criteria (Functions and Values) d/	VWR Section 4.6 Presumptions	Contiguous / Overlaps VSWI (Y/N)	Associated Streams	Mapped Area (Sq Ft)	Functionally Significant (Y/N)	Recommended VWR Classification	Comments
44	T-MH-W2	145.90	Mount Holly	PEM	2L, 4L	NA	No	No	342	No	III	Very small PEM wetland on a hillslope between highway and railroad tracks.
44	T-MH-AW-2	145.90	Mount Holly	PFO	2L, 4L	NA	No	No	1501	No	III	Small isolated wetland
44	T-MH-W3	146.00	Mount Holly	PEM	1L, 2L, 4L	NA	No	No	439	No	III	PEM wetland; saturated to surface; sulfur odor; drains to roadside ditch
44	T-MH-AW-3	146.00	Mount Holly	PFO	1L, 2L, 4L	NA	No	No	3955	No	III	Small isolated wetland
44	T-MH-AW-57	146.00	Mount Holly	PFO	1L,2L,10L	NA	No	No	1522	No	III	Small isolated wetland swale
44	T-LU-W16	146.30	Ludlow	PEM	2P, 4L	c	No	T-MH-AS1	453	Yes	II	Small PEM wetland; narrow wetland swale; drains to Branch Brook.
44	T-LU-AW-16	146.30	Ludlow	PEM	2P, 4L	c	No	T-MH-AS1	376	Yes	II	Small PEM wetland; narrow wetland swale; drains to Branch Brook.
44	T-LU-W14	146.50	Ludlow	PEM	2L, 4L	NA	No	No	676	No	III	PEM wetland; groundwater seep; drains to field.
44	T-LU-AW-14	146.50	Ludlow	PEM	2L, 4L	NA	No	No	2113	No	III	PEM wetland; groundwater seep; drains to field.
45	T-LU-W15	146.90	Ludlow	PEM	1L, 2P, 4L	NA	No	No	899	No	III	Saturated to the surface; below transmission lines on steep slope.
45	T-LU-AW-15	146.90	Ludlow	PSS	1L, 2P, 4L	NA	No	No	7069	No	III	Small wetland under transmission corridor
45	T-LU-W17	147.20	Ludlow	PEM	1L, 2P, 4L	NA	No	No	204	No	III	Very small isolated PEM wetland.
45	T-LU-W18	147.20	Ludlow	PEM/PSS	1L, 2P, 4L	NA	No	No	3678	No	III	Wetland receives water from a slope seep and dissipates before reaching the culvert at the highway.
45	T-LU-AW17	147.20	Ludlow	PEM	1L, 2P, 4L	NA	No	No	1733	No	III	Very small isolated PEM wetland.
45	T-LU-AW-18	147.20	Ludlow	PEM/PSS	1L, 2P, 4L	NA	No	No	3816	No	III	Wetland receives water from a slope seep and dissipates before reaching the culvert at the highway.
45	T-LU-W13	147.60	Ludlow	PEM	1H, 2P, 3P, 4L	c	No	T-LU-S3	11137	Yes	II	Large PEM wetland; saturated to the surface; intermittent stream present; complex connected through culverts.
45	T-LU-AW-13	147.60	Ludlow	PEM	1H, 2P, 3P, 4L	NA	No	No	11060	Yes	II	Large PEM wetland; saturated to the surface; intermittent stream present; complex connected through culverts.
45	T-LU-W1	148.10	Ludlow	PEM	2L	NA	No	No	136	No	III	Small; isolated seep in a residential lawn; mowed downslope.
45	T-LU-AW-1	148.10	Ludlow	PEM	2L	NA	No	No	164	No	III	Small; isolated seep in a residential lawn; mowed downslope.
47	T-LU-W12	149.00	Ludlow	PEM	2P, 3P, 4L	c	No	T-LU-S28	419	Yes	II	PEM wetlands; saturated to the surface; drain to jurisdictional ditch; ephemeral stream captured in ditch.
47	T-LU-AW-12	149.00	Ludlow	PEM	2P, 3P, 4L	NA	No	No	897	Yes	II	PEM wetlands; saturated to the surface; drain to jurisdictional ditch; ephemeral stream captured in ditch.
47	T-LU-W11	149.30	Ludlow	PFO	1L, 2L, 4L	NA	No	No	1194	No	III	Wetland on both sides of road; saturated to surface; manmade drainage pattern on west side disperses flow.
47	T-LU-AW-11	149.30	Ludlow	PFO	1L, 2L, 4L	NA	No	No	860	No	III	manmade drainage pattern on west side disperses flow.
47	T-LU-AW-26	149.40	Ludlow	PSS	1P, 2P, 4P, 5P	g	No	No	1053	Yes	II	Wetland drains into Lake Rescue under VELCO ROW
47	T-LU-AW-25	149.50	Ludlow	PFO	1P, 2P, 3P, 4P, 5P	b g	No	T-LU-AS26	94	Yes	II	Drains into large PFO complex
47	T-LU-W10	149.60	Ludlow	PEM	1P, 2P, 4L	NA	No	T-LU-DITCH3	374	Yes	II	Depressional wetland; located on a side slope; drains to jurisdictional ditch on east side.
47	T-LU-AW-10	149.60	Ludlow	PFO	1P, 2P, 4L	NA	No	No	12672	Yes	II	Large, Isolated forested wetland
48	T-LU-W9	150.50	Ludlow	PSS/PEM	1H, 2P, 3P, 4P	b	Yes	T-LU-S19	3103	Yes	II	Primarily a PSS wetland bordering an intermittent stream which flows out of a VSWI wetland; saturated to surface.
48	T-LU-AW-9	150.50	Ludlow	PSS/PEM	1H, 2P, 3P, 4P	b	Yes	T-LU-S19	27358	Yes	II	Primarily a PSS wetland bordering an intermittent stream which flows out of a VSWI wetland; saturated to surface.
48	T-LU-W8	150.80	Ludlow	PSS/PEM	1H, 2P, 3P, 4H	NA	Yes	No	1412	Yes	II	Large PSS/PEM wetlands on both sides of road; downstream from VSWI wetland; saturated to the surface with ephemeral stream flow.
48	T-LU-AW-8	150.80	Ludlow	PSS/PEM	1H, 2P, 3P, 4H	NA	Yes	No	17636	Yes	II	Large PSS/PEM wetlands on both sides of road; downstream from VSWI wetland; saturated to the surface with ephemeral stream flow.
48	T-LU-W7	151.10	Ludlow	PEM	1L, 2L, 3P, 4H	NA	No	No	506	No	III	Depressional wetland; saturated to surface; drains to jurisdictional roadside ditch.
48	T-LU-AW-7	151.10	Ludlow	PEM	1L, 2L, 3P, 4H	NA	No	No	6032	Yes	II	Depressional wetland; saturated to surface; drains to jurisdictional roadside ditch.
48	T-LU-W6	151.30	Ludlow	PEM/PSS	1L, 2L, 4H	NA	No	No	1086	No	III	PEM/PSS wetland; saturated to surface; sloped meadow; large ruts associated with skidder/logging road.
49	T-LU-W5	151.70	Ludlow	PEM	0	NA	No	No	632	No	III	Isolated wetland; marginal; saturated to the surface; near large field (east).
49	T-LU-W4	151.80	Ludlow	PSS	1H, 2P, 3P, 4H, 9P	b	Yes	T-LU-S11	11550	Yes	II	Large wetlands on both sides of road; intermittent stream present; in VSWI wetland complex.
49	T-LU-AW-4	151.80	Ludlow	PSS/PFO	1H, 2P, 3P, 4H, 9P	b	Yes	T-LU-S11	84045	Yes	II	Large wetlands on both sides of road; intermittent stream present; in VSWI wetland complex.
49	T-LU-AW-5	151.7	Ludlow	PEM	0	NA	No	No	169	No	III	Isolated wetland; marginal; saturated to the surface; near large field (east).
49	T-LU-AW-6	151.30	Ludlow	PEM/PSS	1L, 2L, 4H	NA	No	No	1784	Yes	II	Drains into large PEM wetland
50	T-LU-W3	152.50	Ludlow	PEM	2L, 4L	NA	No	No	110	No	III	Very small PEM wetland in residential area with fields and forests; connects to larger off-ROW wetland.
50	T-LU-AW-3	152.50	Ludlow	PFO	2L, 4L	NA	No	No	1522	No	III	small isolated wetland
50	T-LU-W2	152.70	Ludlow	PEM	1L, 2L, 4L	NA	No	T-LU-DITCH1	702	No	III	PEM wetland fed by groundwater discharge; water exits wetland as jurisdictional ditch.
50	T-LU-AW-2	152.70	Ludlow	PFO	1L, 2L, 4L	NA	No	No	660	No	III	small isolated wetland
50	T-LU-AW-23	152.80	Ludlow	PEM/PSS	1P,2P,3P,4P,5P	g	No	No	1638	Yes	II	Old field
50	T-LU-AW-20	152.90	Ludlow	PEM/PSS	1P,2P,3P,4P,5P	g	No	No	7093	Yes	II	large wetland complex extends upslope under VELCO ROW
50	T-LU-W19	153.00	Ludlow	PEM	0	NA	No	No	369	No	III	Small isolated PEM wetland near transmission line ROW; forests and fields present.
50	T-LU-AW-24	152.20	Ludlow	PFO	1L,2L,3L,4P,5L	c g	No	T-LU-S-10	3031	No	III	small isolated wetland
51	V-AL-W-1	0.10	Alburgh	PEM	1L, 2L	NA	No	No	2292	No	III	Located in active pasture outside of ROW
51	V-AL-W-2	0.50	Alburgh	PEM/ PFO	1P, 2P, 10P	b	No	No	17397	Yes	II	Contiguous with Lake Champlain

a/ Listed in order from west to east.
b/ Mile post data from TRC 10/31/2014
c/ Cowardin Classifications (Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitat of the United States.)

d/ Functions and Values numbers refer to the Vermont Functions and Values, designated in the 2010 Vermont Wetland Rules (under 10 V.S.A. § 905(7)), and were determined using the Vermont Wetland Evaluation Form.

Vermont Functions and Values	Equivalent or Similar Federal Functions and Values
1 - Water storage for flood water and storm runoff	Floodflow Alteration (Storage and Desynchronization)
2 - Surface and ground water protection	Groundwater Recharge/Discharge, Sediment/Toxicant Retention, Nutrient Removal/Retention/Transformation
3 - Fish habitat	Fish and Shellfish Habitat
4 - Wildlife habitat	Wildlife Habitat, Production Export (Nutrient)
5 - Exemplary wetland natural community	Endangered Species, Uniqueness/Heritage
6 - Rare, threatened, and endangered species habitat	Endangered Species
7 - Education and research in natural sciences	Educational/Scientific Value, Uniqueness/Heritage
8 - Recreational value and economic benefit	Recreation (Consumptive & Non-consumptive), Production Export (Nutrient)
9 - Open space and aesthetics	Visual Quality/Aesthetics, Uniqueness/Heritage
10 - Erosion control through binding and stabilizing the soil	Sediment/Shoreline Stabilization

P - Function is Present
L - Provides Function at a Lower Level
H - Provides Function at a Higher Level

ATTACHMENT 4

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-AL-W1A

Project Site: **NECPL** City/County: **Grand Isle** Samp. Date: **6/10/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-AL-W1A**
Investigator(s): **PBW** Section, Township, Range: **Alburgh**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-3%**
Subregion (LRR or MLRA): **LRR R** Lat: **45°0'33.03"N** Long: **73°19'48.385"W** Datum: **NAD 83**
Soil Map Unit: **Amenia silt loam** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **YES**
Wetland Hydrology Present? **YES**
Is This Sample Area Within a Wetland? **YES**

Remarks:
within pasture, just outside of study area

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? Depth (inches):
Saturation Present? Depth (inches):
Wetland Hydrology Present? **YES**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of May was 3.89"(departure from normal value is not available) ; 0.02" in the 5 days prior in Plattsburg, NY (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 3/1**						**SILT LOAM**	
8-12+	**2.5Y 5/1**		**10YR 5/6**	**5**	**C**	**M**	**SILT LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	X	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-AL-W1A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Carex echinata**	**38**	**X**	**OBL**
2. **Ranunculus acris**	**38**	**X**	**FAC**
3. **Juncus effusus**	**15**		**OBL**
4. **Equisetum arvense**	**15**		**FAC**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	106	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **2** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**53** x 1 =	**53**
FACW	x 2 =	
FAC	**53** x 3 =	**159**
FACU	x 4 =	
UPL	x 5 =	
Sum:	**106** (A)	**212** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-AL-W1B

Project Site: **NECPL** City/County: **Grand Isle** Samp. Date: **6/10/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-AL-W1B**
Investigator(s): **PBW** Section, Township, Range: **Alburgh**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **convex** Slope (%): **0-3%**
Subregion (LRR or MLRA): **LRR R** Lat: **45°0'25.123"N** Long: **73°19'55.513"W** Datum: **NAD 83**
Soil Map Unit: **Kendaia silt loam** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present?	**NO**	
Wetland Hydrology Present?	**NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? ___ Depth (inches): ___
Water Table Present? ___ Depth (inches): ___
Saturation Present? ___ Depth (inches): ___
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of May was 3.89"(departure from normal value is not available) ; 0.02" in the 5 days prior in Plattsburg, NY (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	**10YR 3/2**						**SILT LOAM**	
12-16+	**2.5Y 5/3**							**Water at 16"**

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: ___
Depth (inches): ___
Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-AL-W1B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Phalaris arundinacea**	**63**	**X**	**FACW**
2. **Galium mollugo**	**15**		**FACU**
3. **Dactylis glomerata**	**15**		**FACU**
4. **Cirsium vulgare**	**15**		**FACU**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	108	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **63**	x 2 =	**126**
FAC	x 3 =	
FACU **45**	x 4 =	**180**
UPL	x 5 =	
Sum: **108** (A)		**306** (B)

Prevalence Index = B/A = **2.83**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W2A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W2A**
Investigator(s): **ARC** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **concave** Slope (%): **25-50%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°43'59.97"N** Long: **73°21'57.029"W** Datum: **NAD 83**
Soil Map Unit: **Vergennes Clay** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **YES**
Wetland Hydrology Present? **YES**
Is This Sample Area Within a Wetland? **YES**

Remarks:
near flag #2

HYDROLOGY

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

	Surface Water (A1)	X	Water-Stained Leaves (B9)
	High Water Table (A2)		Aquatic Fauna (B13)
	Saturation (A3)		Marl Deposits (B13)
	Water Marks (B1)		Hydrogen Sulfide Odor (C1)
X	Sediment Deposits (B2)		Oxidized Rhizospheres on Living Roots (C3)
X	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? Depth (inches):
Saturation Present? Depth (inches):
Wetland Hydrology Present? **YES**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 4/1**		**10YR 3/3**		**C**	**M**	**SILTY CLAY**	
4-14	**5Y 3/1**		**5YR 4/6**		**C**	**M**	**CLAY**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	X	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)	X	Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W2A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Thuja occidentalis**	**3**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	3	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Cornus amomum**	**15**	**X**	**FACW**
2. **Rhamnus cathartica**	**3**		**FAC**
3.			
4.			
5.			
6.			
7.			
	18	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Onoclea sensibilis**	**38**	**X**	**FACW**
2. **Impatiens capensis**	**38**	**X**	**FACW**
3. **Symphyotrichum novae-angliae**	**15**		**FACW**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	91	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **4** (A)

Dominants across all strata: **4** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **109**	x 2 =	**218**
FAC **3**	x 3 =	**9**
FACU	x 4 =	
UPL	x 5 =	
Sum: **112** (A)		**227** (B)

Prevalence Index = B/A = **2.03**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W2B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W2B**
Investigator(s): **ARC** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **25-50%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°43'59.951"N** Long: **73°21'57.682"W** Datum: **NAD 83**
Soil Map Unit: **Vergennes Clay** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **NO**
Wetland Hydrology Present? **NO**
Is This Sample Area Within a Wetland? **NO**

Remarks:
near flag #3

HYDROLOGY

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? ___ Depth (inches): ___
Water Table Present? ___ Depth (inches): ___
Saturation Present? ___ Depth (inches): ___
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	**10YR 4/4**						**CLAY**	
3-10	**10YR 5/4**						**CLAY**	
10-12+	**10YR 5/6**						**CLAY**	**Saturated past 12"**

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: ___
Depth (inches): ___
Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W2B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Thuja occidentalis**	**15**	**X**	**FACW**
2. **Pinus strobus**	**3**		**FACU**
3.			
4.			
5.			
6.			
7.			
	18	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Thuja occidentalis**	**15**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Rhamnus cathartica**	**15**	**X**	**FAC**
2. **Lonicera morrowii**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Veronica officinalis**	**3**	**X**	**FACU**
2. **Taraxacum officinale**	**3**	**X**	**FACU**
3. **Dryopteris intermedia**	**3**	**X**	**FAC**
4. **Lysimachia nummularia**	**3**	**X**	**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	12	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **5** (A)

Dominants across all strata: **8** (B)

% Dominants OBL, FACW, FAC: **63%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **33**	x 2 =	**66**
FAC **18**	x 3 =	**54**
FACU **24**	x 4 =	**96**
UPL	x 5 =	
Sum: **75** (A)		**216** (B)

Prevalence Index = B/A = **2.88**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W-5A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/16/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W-5A**
Investigator(s): **CMM** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **5-25%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°43'43.774"N** Long: **73°20'29.985"W** Datum: **NAD 83**
Soil Map Unit: **Farmington-Galway-Galoo complex** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	**Surface**
Saturation Present?	X	Depth (inches):	**Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.00" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0							**MUCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W-5A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Typha latifolia**	**63**	**X**	**OBL**
2. **Equisetum fluviatile**	**63**	**X**	**OBL**
3. **Acorus americanus**	**15**		**OBL**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	141	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **2** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**141** x 1 =	**141**
FACW	x 2 =	
FAC	x 3 =	
FACU	x 4 =	
UPL	x 5 =	
Sum:	**141** (A)	**141** (B)

Prevalence Index = B/A = **1.00**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W-5B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/16/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W-5B**

Investigator(s): **CMM** Section, Township, Range: **Benson**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **5-25%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°43'43.608"N** Long: **73°20'29.723"W** Datum: **NAD 83**

Soil Map Unit: **Farmington-Galway-Galoo complex** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.00" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 4/3**						**SILT LOAM**	
6-14	**10YR 5/3**						**SILT LOAM**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W-5B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Rhus aromatica**	**38**	**X**	**UPL**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Lonicera morrowii**	**38**	**X**	**FACU**
2. **Rubus idaeus**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	53	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Equisetum arvense**	**38**	**X**	**FAC**
2. **Toxicodendron radicans**	**15**	**X**	**FAC**
3. **Taraxacum officinale**	**3**		**FACU**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	56	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: **40%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC **53**	x 3 =	**159**
FACU **56**	x 4 =	**224**
UPL **38**	x 5 =	**190**
Sum: **147** (A)		**573** (B)

Prevalence Index = B/A = **3.90**

Hydrophytic Vegetation Indicators:

- ____ Dominance Test is > 50%
- ____ Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W-11A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/16/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W-11A**

Investigator(s): **CMM** Section, Township, Range: **Benson**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **8-25%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°43'8.667"N** Long: **73°19'56.719"W** Datum: **NAD 83**

Soil Map Unit: **Taconic-Macomber complex** NWI Class: **PEM/PSS**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)		Surface Soil Cracks (B6)
X	High Water Table (A2)		Aquatic Fauna (B13)		Drainage Patterns (B10)
X	Saturation (A3)		Marl Deposits (B13)		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 (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 (B7)		Other (Explain in Remarks)		Shallow Aquitard (D3)
	Sparsely Vegetated Concave Surface (B8)				Microtopographic Relief (D4)
					FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?		Depth (inches):		
Water Table Present?	X	Depth (inches):	6	Wetland Hydrology Present? **YES**
Saturation Present?	X	Depth (inches):	Surface	

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.00" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 2/1**						**SILT LOAM**	
8-15	**10YR 6/2**		**10YR 6/6**		**C**	**M**	**SILTY CLAY LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)		2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)				Coast Prairie Redox (A16) (LRR K, L, R)
	Black Histic (A3)		Thin Dark Surface (S9) (LRR R, MLRA 149B)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Hydrogen Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)		Dark Surface (S9) (LRR K, L, M)
	Stratified Layers (A5)		Loamy Gleyed Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)
	Depleted Below Dark Surface (A11)	X	Depleted Matrix (F3)		Thin Dark Surface (S9) (LRR K, L)
	Thick Dark Surface (A12)		Redox Dark Surface (F6)		Iron-Manganese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)		Redox Depressions (F8)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)				Red Parent Material (F21)
	Stripped Matrix (S6)				Very Shallow Dark Surface (TF12)
	Dark Surface (S7) (LRR R, MLRA 149B)				Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W-11A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Acer rubrum**	**15**	**X**	**FAC**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Spiraea alba**	**15**	**X**	**FACW**
2. **Salix bebbiana**	**15**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Onoclea sensibilis**	**87**	**X**	**FACW**
2. **Impatiens capensis**	**38**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **5** (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **155**	x 2 =	**310**
FAC **15**	x 3 =	**45**
FACU	x 4 =	
UPL	x 5 =	
Sum: **170** (A)		**355** (B)

Prevalence Index = B/A = **2.09**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W-11B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/16/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W-11B**

Investigator(s): **CMM** Section, Township, Range: **Benson**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **8-25%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°43'8.469"N** Long: **73°19'56.692"W** Datum: **NAD 83**

Soil Map Unit: **Taconic-Macomber complex** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.00" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 5/3**						**LOAM**	
6-14	**10YR 5/4**						**LOAM**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W-11B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Rhus aromatica**	**38**	**X**	**UPL**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Rhus aromatica**	**38**	**X**	**UPL**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Lonicera morrowii**	**38**	**X**	**FACU**
2. **Rubus idaeus**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	53	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Phalaris arundinacea**	**15**	**X**	**FACW**
2. **Taraxacum officinale**	**15**	**X**	**FACU**
3. **Toxicodendron radicans**			**FAC**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **6** (B)

% Dominants OBL, FACW, FAC: **17%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **15**	x 2 =	**30**
FAC	x 3 =	
FACU **68**	x 4 =	**272**
UPL **76**	x 5 =	**380**
Sum: **159** (A)		**682** (B)

Prevalence Index = B/A = **4.29**

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is > 50%
- ___ Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W-14A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/16/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W-14A**
Investigator(s): **CMM** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **N/A**
Subregion (LRR or MLRA): **LRR R** Lat: **43°42'50.028"N** Long: **73°19'19.09"W** Datum: **NAD 83**
Soil Map Unit: **Linwood muck** NWI Class: **PEM/PSS**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)		Surface Soil Cracks (B6)
X	High Water Table (A2)		Aquatic Fauna (B13)	X	Drainage Patterns (B10)
X	Saturation (A3)		Marl Deposits (B13)		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 (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 (B7)		Other (Explain in Remarks)		Shallow Aquitard (D3)
	Sparsely Vegetated Concave Surface (B8)				Microtopographic Relief (D4)
					FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?		Depth (inches):		
Water Table Present?	X	Depth (inches):	3	Wetland Hydrology Present? **YES**
Saturation Present?	X	Depth (inches):	Surface	

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.00" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0							**MUCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)		2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)		Coast Prairie Redox (A16) (LRR K, L, R)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)		Dark Surface (S9) (LRR K, L, M)
	Stratified Layers (A5)		Depleted Matrix (F3)		Polyvalue Below Surface (S8) (LRR K, L)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)		Thin Dark Surface (S9) (LRR K, L)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)		Iron-Manganese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)		Piedmont Floodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)				Red Parent Material (F21)
	Stripped Matrix (S6)				Very Shallow Dark Surface (TF12)
	Dark Surface (S7) (LRR R, MLRA 149B)				Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W-14A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Salix bebbiana**	**15**	**X**	**FACW**
2. **Cornus sericea**	**15**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Onoclea sensibilis**	**98**	**X**	**FACW**
2. **Equisetum fluviatile**	**15**		**OBL**
3. **Carex vulpinoidea**	**15**		**OBL**
4. **Impatiens capensis**	**15**		**FACW**
5. **Tiarella cordifolia**	**15**		**FACU**
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	158	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **3** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	**30**	x 1 =	**30**
FACW	**143**	x 2 =	**286**
FAC		x 3 =	
FACU	**15**	x 4 =	**60**
UPL		x 5 =	
Sum:	**188** (A)		**376** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W-14B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/16/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W-14B**
Investigator(s): **CMM** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **8-25%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°42'50.802"N** Long: **73°19'20.169"W** Datum: **NAD 83**
Soil Map Unit: **Taconic-Macomber complex** NWI Class:
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **NO**
Wetland Hydrology Present? **NO**
Is This Sample Area Within a Wetland? **NO**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? Depth (inches):
Saturation Present? Depth (inches):
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.00" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 4/4**						**CLAY LOAM**	
6+							**BEDROCK**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: **Bedrock**
Depth (inches): **6**
Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W-14B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Acer rubrum**	**38**	**X**	**FAC**
2. **Acer saccharinum**	**15**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
	53	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Acer rubrum**	**15**	**X**	**FAC**
2. **Fagus grandifolia**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Parathelypteris noveboracensis**	**38**	**X**	**FAC**
2. **Phegopteris hexagonoptera**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	53	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **4** (A)

Dominants across all strata: **6** (B)

% Dominants OBL, FACW, FAC: **67%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **15**	x 2 =	**30**
FAC **91**	x 3 =	**273**
FACU **30**	x 4 =	**120**
UPL	x 5 =	
Sum: **136** (A)		**423** (B)

Prevalence Index = B/A = **3.11**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- ____ Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W107A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W107A**
Investigator(s): **PBW** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°41'11.628"N** Long: **73°17'24.065"W** Datum: **NAD 83**
Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **YES**
Wetland Hydrology Present? **YES**
Is This Sample Area Within a Wetland? **YES**

Remarks:
adjacent to hay field

HYDROLOGY

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? **X** Depth (inches): **Surface**
Saturation Present? **X** Depth (inches): **Surface**
Wetland Hydrology Present? **YES**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**2.5Y 3/2**						**SILT LOAM**	
8-16	**2.5Y 5/1**		**10YR 4/6**	**7**	**C**	**M**	**CLAY LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	X	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W107A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Phalaris arundinacea**	**83**	**X**	**FACW**
2. **Typha angustifolia**	**38**	**X**	**OBL**
3. **Lythrum salicaria**	**3**		**OBL**
4. **Onoclea sensibilis**	**3**		**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	127	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **2** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**41**	x 1 = **41**
FACW	**86**	x 2 = **172**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**127** (A)	**213** (B)

Prevalence Index = B/A = **1.68**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W107B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W107B**
Investigator(s): **PBW** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **convex** Slope (%): **3-8%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°41'11.617"N** Long: **73°17'24.356"W** Datum: **NAD 83**
Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**
Hydric Soil Present? **NO**
Wetland Hydrology Present? **NO**
Is This Sample Area Within a Wetland? **NO**

Remarks:
adjacent to hay field

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? Depth (inches):
Saturation Present? Depth (inches):
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 3/1**						**SANDY LOAM**	
4+							**FILL**	**Sandy/ gravelly roadside fill material**

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W107B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Dactylis glomerata**	**65**	**X**	**FACU**
2. **Phalaris arundinacea**	**15**		**FACW**
3. **Galium mollugo**	**3**		**FACU**
4. **Pastinaca sativa**	**3**		**NI**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	86	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **15**	x 2 =	**30**
FAC	x 3 =	
FACU **68**	x 4 =	**272**
UPL	x 5 =	
Sum: **83** (A)		**302** (B)

Prevalence Index = B/A = **3.64**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

Unknown goldenrod (Solidago sp.) at 38%

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W111A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W111A**
Investigator(s): **PBW** Section, Township, Range: **Benson**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°40'29.387"N** Long: **73°17'20.035"W** Datum: **NAD 83**
Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)	**X**	Water-Stained Leaves (B9)	
X	High Water Table (A2)		Aquatic Fauna (B13)	
X	Saturation (A3)		Marl Deposits (B13)	
	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)	
X	Iron Deposits (B5)		Thin Muck Surface (C7)	
	Inundation Visible on Aerial (B7)		Other (Explain in Remarks)	
	Sparsely Vegetated Concave Surface (B8)			

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?		Depth (inches):	
Saturation Present?	**X**	Depth (inches):	**6**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**2.5Y 4/2**						**SILTY CLAY LOAM**	
6-14	**2.5Y 5/1**		**10YR 5/6**	**10**	**C**	**M**	**CLAY**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	**X**	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W111A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Phalaris arundinacea**	**98**	**X**	**FACW**
2. **Impatiens capensis**	**3**		**FACW**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	101	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **101**	x 2 =	**202**
FAC	x 3 =	
FACU	x 4 =	
UPL	x 5 =	
Sum: **101** (A)		**202** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

Unknown sedge (Carex sp.) at 15%

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-BE-W111B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-BE-W111B**

Investigator(s): **PBW** Section, Township, Range: **Benson**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **convex** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°40'29.449"N** Long: **73°17'20.358"W** Datum: **NAD 83**

Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**						**SILTY CLAY LOAM**	
6-14	**10YR 4/4**		**10YR 5/6**	**2**	**C**	**M**	**CLAY**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-BE-W111B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Dactylis glomerata**	**65**	**X**	**FACU**
2. **Taraxacum officinale**	**15**		**FACU**
3. **Ranunculus acris**	**15**		**FAC**
4. **Trifolium pratense**	**15**		**FACU**
5. **Phalaris arundinacea**	**15**		**FACW**
6. **Vicia cracca tenuifolia**	**3**		**NI**
7.			
8.			
9.			
10.			
11.			
12.			
	128	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **15**	x 2 =	**30**
FAC **15**	x 3 =	**45**
FACU **95**	x 4 =	**380**
UPL	x 5 =	
Sum: **125** (A)		**455** (B)

Prevalence Index = B/A = **3.64**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WH-W103A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WH-W103A**

Investigator(s): **PBW** Section, Township, Range: **West Haven**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°40'7.283"N** Long: **73°17'23.239"W** Datum: **NAD 83**

Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **PEM**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present? **YES**	
Wetland Hydrology Present? **YES**	

Remarks:

in old pasture

HYDROLOGY

Wetland Hydrology Indicators:

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

X	Surface Water (A1)		Water-Stained Leaves (B9)	X	Drainage Patterns (B10)
X	High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Lines (B16)
X	Saturation (A3)		Marl Deposits (B13)		Dry-Season Water Table (C2)
	Water Marks (B1)		Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)
	Sediment Deposits (B2)		Oxidized Rhizospheres on Living Roots (C3)		Saturation Visible on Aerial (C9)
	Drift Deposits (B3)		Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
	Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)		Geomorphic Position (D2)
	Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)
	Inundation Visible on Aerial (B7)		Other (Explain in Remarks)		Microtopographic Relief (D4)
	Sparsely Vegetated Concave Surface (B8)				FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?		Depth (inches):		
Water Table Present?	X	Depth (inches):	**Surface**	Wetland Hydrology Present? **YES**
Saturation Present?	X	Depth (inches):	**Surface**	

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**2.5Y 3/2**						**SILT LOAM**	
8-16	**2.5Y 5/1**		**10YR 5/6**	**5**	**C**	**M**	**SILT LOAM**	

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

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)		2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)		Coast Prairie Redox (A16) (LRR K, L, R)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)		Dark Surface (S9) (LRR K, L, M)
	Stratified Layers (A5)	X	Depleted Matrix (F3)		Polyvalue Below Surface (S8) (LRR K, L)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)		Thin Dark Surface (S9) (LRR K, L)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)		Iron-Manganese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)		Piedmont Floodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)				Red Parent Material (F21)
	Stripped Matrix (S6)				Very Shallow Dark Surface (TF12)
	Dark Surface (S7) (LRR R, MLRA 149B)				Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WH-W103A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Acorus americanus**	**65**	**X**	**OBL**
2. **Phalaris arundinacea**	**15**		**FACW**
3. **Typha latifolia**	**15**		**OBL**
4. **Equisetum arvense**	**3**		**FAC**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	98	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**80**	x 1 = **80**
FACW	**15**	x 2 = **30**
FAC	**3**	x 3 = **9**
FACU		x 4 =
UPL		x 5 =
Sum:	**98** (A)	**119** (B)

Prevalence Index = B/A = **1.21**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WH-W103B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WH-W103B**

Investigator(s): **PBW** Section, Township, Range: **West Haven**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **convex** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°40'7.304"N** Long: **73°17'23.301"W** Datum: **NAD 83**

Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**						**SILT LOAM**	
6-14	**2.5Y 5/3**						**CLAY LOAM**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WH-W103B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5' RADIUS)			
1. **Dactylis glomerata**	**63**	**X**	**FACU**
2. **Pastinaca sativa**	**15**		**NI**
3. **Taraxacum officinale**	**15**		**FACU**
4. **Daucus carota**	**15**		**UPL**
5. **Achillea millefolium**	**3**		**FACU**
6. **Asclepias syriaca**	**3**		**UPL**
7. **Arctium minus**	**3**		**FACU**
8.			
9.			
10.			
11.			
12.			
	117 = Total Cover		
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU **84**	x 4 =	**336**
UPL **18**	x 5 =	**90**
Sum: **102** (A)		**426** (B)

Prevalence Index = B/A = **4.18**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WH-W-5A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WH-W-5A**

Investigator(s): **CMM** Section, Township, Range: **West Haven**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-3%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°39'21.083"N** Long: **73°17'35.747"W** Datum: **NAD 83**

Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **PEM**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)		Surface Soil Cracks (B6)
X	High Water Table (A2)		Aquatic Fauna (B13)		Drainage Patterns (B10)
X	Saturation (A3)		Marl Deposits (B13)		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 (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 (B7)		Other (Explain in Remarks)		Shallow Aquitard (D3)
	Sparsely Vegetated Concave Surface (B8)				Microtopographic Relief (D4)
					FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?		Depth (inches):		
Water Table Present?	X	Depth (inches):	**Surface**	Wetland Hydrology Present? **YES**
Saturation Present?	X	Depth (inches):	**Surface**	

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 2/1**						**CLAY LOAM**	
6-14	**10YR 6/2**		**10YR 5/6**		**C**	**M**	**CLAY LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	X	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WH-W-5A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Phalaris arundinacea**	**98**	**X**	**FACW**
2. **Typha latifolia**	**15**		**OBL**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	113	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**15**	x 1 = **15**
FACW	**98**	x 2 = **196**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**113** (A)	**211** (B)

Prevalence Index = B/A = **1.87**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WH-W-5B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WH-W-5B**

Investigator(s): **CMM** Section, Township, Range: **West Haven**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **0-3%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°39'20.948"N** Long: **73°17'35.896"W** Datum: **NAD 83**

Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present?	**NO**	
Wetland Hydrology Present?	**NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B13)	
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 (B7)	Other (Explain in Remarks)	
Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**2.5Y 4/3**						**CLAY LOAM**	
4-14	**10YR 5/4**						**CLAY**	

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

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

Hydric Soil Indicators:

Histosol (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR K, L)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Stratified Layers (A5)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	
Sandy Gleyed Matrix (S4)		
Sandy Redox (S5)		
Stripped Matrix (S6)		
Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WH-W-5B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Cirsium arvense**	**38**	**X**	**FACU**
2. **Pastinaca sativa**	**15**	**X**	**NI**
3. **Phalaris arundinacea**	**15**	**X**	**FACW**
4. **Phleum pratense**	**15**	**X**	**FACU**
5. **Asclepias syriaca**	**15**	**X**	**UPL**
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	98	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: **20%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **15**	x 2 =	**30**
FAC	x 3 =	
FACU **53**	x 4 =	**212**
UPL **15**	x 5 =	**75**
Sum: **83** (A)		**317** (B)

Prevalence Index = B/A = **3.82**

Hydrophytic Vegetation Indicators:

- Dominance Test is > 50%
- Prevalence Index is <= 3.0
- Problematic Hydrophytic Vegetation[1] (explain)
- Rapid Test for Hydrophytic Vegetation
- Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WH-W-13A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WH-W-13A**
Investigator(s): **CMM** Section, Township, Range: **West Haven**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°38'16.9"N** Long: **73°17'50.794"W** Datum: **NAD 83**
Soil Map Unit: **Vergennes clay** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)	
X	High Water Table (A2)		Aquatic Fauna (B13)	
X	Saturation (A3)		Marl Deposits (B13)	
	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 (B7)		Other (Explain in Remarks)	
	Sparsely Vegetated Concave Surface (B8)			

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	**Surface**
Saturation Present?	X	Depth (inches):	**Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 2/1**						**SILT LOAM**	
8-14	**10YR 5/1**		**10YR 5/6**		**C**	**M**	**SILT LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)	X	Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WH-W-13A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Acorus americanus**	**38**	**X**	**OBL**
2. **Phalaris arundinacea**	**38**	**X**	**FACW**
3. **Impatiens capensis**	**38**	**X**	**FACW**
4. **Typha latifolia**	**15**		**OBL**
5. **Onoclea sensibilis**	**15**		**FACW**
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	144	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **3** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**53**	x 1 = **53**
FACW	**91**	x 2 = **182**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**144** (A)	**235** (B)

Prevalence Index = B/A = **1.63**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WH-W-13B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WH-W-13B**

Investigator(s): **CMM** Section, Township, Range: **West Haven**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°38'16.862"N** Long: **73°17'50.932"W** Datum: **NAD 83**

Soil Map Unit: **Vergennes clay** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 4/3**						**FILL**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: **Fill**

Depth (inches): **6**

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WH-W-13B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5' RADIUS)			
1. **Pastinaca sativa**	**63**	**X**	**NI**
2. **Trifolium pratense**	**15**		**FACU**
3. **Taraxacum officinale**	**15**		**FACU**
4. **Cirsium arvense**	**15**		**FACU**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	108 = Total Cover		
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU **45**	x 4 =	**180**
UPL	x 5 =	
Sum: **45** (A)		**180** (B)

Prevalence Index = B/A = **4.00**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W-25A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W-25A**

Investigator(s): **CMM** Section, Township, Range: **Fair Haven**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **15-25%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°37'12.554"N** Long: **73°17'49.856"W** Datum: **NAD 83**

Soil Map Unit: **Dutchess silt loam** NWI Class: **PEM/PSS**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present? **YES**	
Wetland Hydrology Present? **YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? **X** Depth (inches): **Surface**

Saturation Present? **X** Depth (inches): **Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0							**MUCK**	

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

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W-25A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Cornus sericea**	15	X	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Carex crinita**	38	X	OBL
2. **Juncus effusus**	15	X	OBL
3. **Typha latifolia**	15	X	OBL
4. **Onoclea sensibilis**	15	X	FACW
5. **Caltha palustris**	3		OBL
6. **Impatiens capensis**	3		FACW
7. **Equisetum fluviatile**	3		OBL
8.			
9.			
10.			
11.			
12.			
	92	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **5** (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**74**	x 1 = **74**
FACW	**33**	x 2 = **66**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**107** (A)	**140** (B)

Prevalence Index = B/A = **1.31**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W-25B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W-25B**

Investigator(s): **CMM** Section, Township, Range: **Fair Haven**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **15-25%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°37'12.386"N** Long: **73°17'49.547"W** Datum: **NAD 83**

Soil Map Unit: **Dutchess silt loam** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 4/3**						**CLAY LOAM**	
4-14	**2.5Y 5/6**						**CLAY LOAM**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W-25B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Spiraea alba**	**15**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Solidago canadensis**	**38**	**X**	**FACU**
2. **Equisetum arvense**	**15**	**X**	**FAC**
3. **Daucus carota**	**15**	**X**	**UPL**
4. **Taraxacum officinale**	**3**		**FACU**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	71	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **4** (B)

% Dominants OBL, FACW, FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL		x 1 =
FACW	**15**	x 2 = **30**
FAC	**15**	x 3 = **45**
FACU	**41**	x 4 = **164**
UPL	**15**	x 5 = **75**
Sum:	**86** (A)	**314** (B)

Prevalence Index = B/A = **3.65**

Hydrophytic Vegetation Indicators:

- Dominance Test is > 50%
- Prevalence Index is <= 3.0
- Problematic Hydrophytic Vegetation[1] (explain)
- Rapid Test for Hydrophytic Vegetation
- Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W-20A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W-20A**
Investigator(s): **CMM** Section, Township, Range: **Fair Haven**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **15-25%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'46.744"N** Long: **73°17'13.251"W** Datum: **NAD 83**
Soil Map Unit: **Vergennes Clay** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **YES**
Wetland Hydrology Present? **YES**

Is This Sample Area Within a Wetland? **YES**

Remarks:
Open feature along stream bank/on both sides of road

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? **X** Depth (inches): **Surface**
Saturation Present? **X** Depth (inches): **Surface**

Wetland Hydrology Present? **YES**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0							**MUCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W-20A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Typha latifolia**	**98**	**X**	**OBL**
2. **Phalaris arundinacea**	**15**		**FACW**
3. **Onoclea sensibilis**	**15**		**FACW**
4. **Caltha palustris**	**15**		**OBL**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	143	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**113**	x 1 = **113**
FACW	**30**	x 2 = **60**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**143** (A)	**173** (B)

Prevalence Index = B/A = **1.21**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W-20B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W-20B**

Investigator(s): **CMM** Section, Township, Range: **Fair Haven**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **15-25%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°36'47.03"N** Long: **73°17'12.917"W** Datum: **NAD 83**

Soil Map Unit: **Vergennes Clay** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present?	**NO**	
Wetland Hydrology Present?	**NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B13)	
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 (B7)	Other (Explain in Remarks)	
Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 4/3**						**CLAY LOAM**	
4-14	**10YR 4/6**						**CLAY LOAM**	

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

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

Hydric Soil Indicators:

Histosol (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR K, L)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Stratified Layers (A5)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	
Sandy Gleyed Matrix (S4)		
Sandy Redox (S5)		
Stripped Matrix (S6)		
Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W-20B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Cornus racemosa**	**38**	**X**	**FAC**
2. **Lonicera morrowii**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	53 = Total Cover		
Herb Stratum (Plot size: 5' RADIUS)			
1. **Solidago canadensis**	**63**	**X**	**FACU**
2. **Tussilago farfara**	**15**		**FACU**
3. **Onoclea sensibilis**	**3**		**FACW**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	81 = Total Cover		
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **33%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **3**	x 2 =	**6**
FAC **38**	x 3 =	**114**
FACU **93**	x 4 =	**372**
UPL	x 5 =	
Sum: **134** (A)		**492** (B)

Prevalence Index = B/A = **3.67**

Hydrophytic Vegetation Indicators:

- Dominance Test is > 50%
- Prevalence Index is <= 3.0
- Problematic Hydrophytic Vegetation[1] (explain)
- Rapid Test for Hydrophytic Vegetation
- Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W-15A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W-15A**
Investigator(s): **CMM** Section, Township, Range: **Fair Haven**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-3%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'25.324"N** Long: **73°16'43.569"W** Datum: **NAD 83**
Soil Map Unit: **Limerick silt loam** NWI Class: **PEM/PSS**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	**Surface**
Saturation Present?	X	Depth (inches):	**Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0							**MUCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W-15A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Alnus incana**	15	X	FACW
2. **Spiraea alba**	15	X	FACW
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Phalaris arundinacea**	98	X	FACW
2. **Onoclea sensibilis**	15		FACW
3. **Typha latifolia**	15		OBL
4. **Carex stricta**	15		OBL
5.			
6. **Equisetum fluviatile**	5		OBL
7.			
8.			
9.			
10.			
11.			
12.			
	148	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **3** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**35**	x 1 = **35**
FACW	**143**	x 2 = **286**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**178** (A)	**321** (B)

Prevalence Index = B/A = **1.80**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W-15B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/20/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W-15B**
Investigator(s): **CMM** Section, Township, Range: **Fair Haven**
Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **0-3%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'25.135"N** Long: **73°16'43.902"W** Datum: **NAD 83**
Soil Map Unit: **Limerick silt loam** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**
Hydric Soil Present? **NO**
Wetland Hydrology Present? **NO**
Is This Sample Area Within a Wetland? **NO**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? Depth (inches):
Saturation Present? Depth (inches):
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	**10YR 6/2**						**FILL**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
[2]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) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: **Fill**
Depth (inches): **9**
Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W-15B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1. **Pinus strobus**	**38**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Lonicera morrowii**	**38**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Pastinaca sativa**	**15**	**X**	**NI**
2. **Taraxacum officinale**	**15**	**X**	**FACU**
3. **Tussilago farfara**	**15**	**X**	**FACU**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	45	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU **106**	x 4 =	**424**
UPL	x 5 =	
Sum: **106** (A)		**424** (B)

Prevalence Index = B/A = **4.00**

Hydrophytic Vegetation Indicators:

- Dominance Test is > 50%
- Prevalence Index is <= 3.0
- Problematic Hydrophytic Vegetation[1] (explain)
- Rapid Test for Hydrophytic Vegetation
- Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W1A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W1A**
Investigator(s): **RMS** Section, Township, Range: **Fair Haven**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-4%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'19.978"N** Long: **73°16'28.536"W** Datum: **NAD 83**
Soil Map Unit: **Deerfield loamy sand** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present? **YES**	
Wetland Hydrology Present? **YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

X	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	Water Marks (B1)	X	Hydrogen Sulfide Odor (C1)
	Sediment Deposits (B2)	X	Oxidized Rhizospheres on Living Roots (C3)
	Drift Deposits (B3)		Presence of Reduced Iron (C4)
	Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)
	Iron Deposits (B5)		Thin Muck Surface (C7)
	Inundation Visible on Aerial (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	X	Depth (inches):	1
Water Table Present?	X	Depth (inches):	Surface
Saturation Present?	X	Depth (inches):	Surface

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
2-0							MUCK	
0-10	2.5Y 3/1					PL	FINE SANDY LOAM	
10-16+	2.5Y 5/2						SAND	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
X	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W1A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Phalaris arundinacea**	**83**	**X**	**FACW**
2. **Onoclea sensibilis**	**15**		**FACW**
3. **Lythrum salicaria**	**3**		**OBL**
4. **Pastinaca sativa**	**3**		**UPL**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	104	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**3**	x 1 = **3**
FACW	**98**	x 2 = **196**
FAC		x 3 =
FACU		x 4 =
UPL	**3**	x 5 = **15**
Sum:	**104** (A)	**214** (B)

Prevalence Index = B/A = **2.06**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W1B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W1B**
Investigator(s): **RMS** Section, Township, Range: **Fair Haven**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **none** Slope (%): **0-3%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'20.345"N** Long: **73°16'28.636"W** Datum: **NAD 83**
Soil Map Unit: **Kingsbury silty clay loam** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**
Hydric Soil Present? **NO**
Wetland Hydrology Present? **NO**
Is This Sample Area Within a Wetland? **NO**

Remarks:
Part of mowed lawn

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? Depth (inches):
Saturation Present? Depth (inches):
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/3**						**FINE SANDY LOAM**	
6-16+	**10YR 4/3**						**SILTY CLAY**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W1B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Pinus strobus**	**15**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Populus tremuloides**	**3**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	3	= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Taraxacum officinale**	**15**	**X**	**FACU**
2. **Solidago canadensis**	**15**	**X**	**FACU**
3. **Phalaris arundinacea**	**3**		**FACW**
4. **Trifolium pratense**	**3**		**FACU**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	36	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: (A)

Dominants across all strata: **4** (B)

% Dominants OBL, FACW, FAC: (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **3**	x 2 =	**6**
FAC	x 3 =	
FACU **51**	x 4 =	**204**
UPL	x 5 =	
Sum: **54** (A)		**210** (B)

Prevalence Index = B/A = **3.89**

Hydrophytic Vegetation Indicators:

- Dominance Test is > 50%
- Prevalence Index is <= 3.0
- Problematic Hydrophytic Vegetation[1] (explain)
- Rapid Test for Hydrophytic Vegetation
- Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

Mowed lawn, unknown grasses present at 83%

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W10A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W10A**
Investigator(s): **RMS** Section, Township, Range: **Fair Haven**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'15.587"N** Long: **73°14'50.929"W** Datum: **NAD 83**
Soil Map Unit: **Windsor loamy sand** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **YES**
Wetland Hydrology Present? **YES**
Is This Sample Area Within a Wetland? **YES**

Remarks:
South side of RT. 4

HYDROLOGY

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

X	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	Water Marks (B1)	X	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? **X** Depth (inches): **1**
Water Table Present? **X** Depth (inches): **SURFACE**
Saturation Present? **X** Depth (inches): **SURFACE**
Wetland Hydrology Present? **YES**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
18-0							**MUCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
X	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W10A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Phalaris arundinacea**	**83**	**X**	**FACW**
2. **Carex aquatilis**	**15**		**OBL**
3. **Pastinaca sativa**	**3**		**UPL**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	101	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	**15**	x 1 =	**15**
FACW	**83**	x 2 =	**166**
FAC		x 3 =	
FACU		x 4 =	
UPL	**3**	x 5 =	**15**
Sum:	**101** (A)		**196** (B)

Prevalence Index = B/A = **1.94**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-FH-W10B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-FH-W10B**
Investigator(s): **RMS** Section, Township, Range: **Fair Haven**
Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **none** Slope (%): **3-8%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'15.313"N** Long: **73°14'50.125"W** Datum: **NAD 83**
Soil Map Unit: **Windsor loamy sand** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**
Hydric Soil Present? **NO**
Wetland Hydrology Present? **NO**
Is This Sample Area Within a Wetland? **NO**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? ___ Depth (inches): ___
Water Table Present? ___ Depth (inches): ___
Saturation Present? Depth (inches): ___
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 3/3**						**FINE SANDY LOAM**	
8-16+	**10YR 5/8**						**FINE SANDY LOAM**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: ___
Depth (inches): ___
Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-FH-W10B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Pinus strobus**	**38**	**X**	**FACU**
2. **Acer saccharum**	**38**	**X**	**FACU**
3. **Quercus rubra**	**15**		**FACU**
4.			
5.			
6.			
7.			
	91	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Fagus grandifolia**	**15**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Lonicera morrowii**	**3**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	3	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Maianthemum canadense**	**38**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	38	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU **147**	x 4 =	**588**
UPL	x 5 =	
Sum: **147** (A)		**588** (B)

Prevalence Index = B/A = **4.00**

Hydrophytic Vegetation Indicators:

- Dominance Test is > 50%
- Prevalence Index is <= 3.0
- Problematic Hydrophytic Vegetation[1] (explain)
- Rapid Test for Hydrophytic Vegetation
- Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W101A

Project Site:	**NECPL**	City/County:	**Rutland**	Samp. Date:	**5/5/2014**
Applicant/Owner:	**TDI**	State:	**Vermont**	Sampling Point:	**V-CN-W101A**
Investigator(s):	**RMS**	Section, Township, Range:	**Castleton**		
Landform (hillslope, terrace, etc.):	**terrace**	Local relief (concave, convex, none):	**concave**	Slope (%):	**0-4%**
Subregion (LRR or MLRA):	**LRR R**	Lat: **43°36'41.377"N**	Long: **73°13'45.582"W**	Datum:	**NAD 83**
Soil Map Unit:	**Deerfield loamy sand**			NWI Class:	**PEM, PSS, PFO, OW**

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

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

X	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	**X**	Depth (inches):	**10**
Water Table Present?	**X**	Depth (inches):	**SURFACE**
Saturation Present?	**X**	Depth (inches):	**SURFACE**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0	**10YR 2/1**						**MUCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

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

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W101A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Acer rubrum**	**15**	**X**	**FAC**
2. **Pinus strobus**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Acer rubrum**	**3**	**X**	**FAC**
2. **Ulmus americana**	**3**	**X**	**FACW**
3. **Pinus strobus**	**3**	**X**	**FACU**
4.			
5.			
6.			
7.			
	9	= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Viburnum dentatum**	**15**	**X**	**FAC**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Symplocarpus foetidus**	**15**	**X**	**OBL**
2. **Typha latifolia**	**15**	**X**	**OBL**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **6** (A)

Dominants across all strata: **8** (B)

% Dominants OBL, FACW, FAC: **75%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	**30**	x 1 =	**30**
FACW	**3**	x 2 =	**6**
FAC	**33**	x 3 =	**99**
FACU	**18**	x 4 =	**72**
UPL		x 5 =	
Sum:	**84** (A)		**207** (B)

Prevalence Index = B/A = **2.46**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W101B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W101B**
Investigator(s): **RMS** Section, Township, Range: **Castleton**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **none** Slope (%): **0-4%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°36'41.105"N** Long: **73°13'45.705"W** Datum: **NAD 83**
Soil Map Unit: **Deerfield loamy sand** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**
Hydric Soil Present? **NO**
Wetland Hydrology Present? **NO**
Is This Sample Area Within a Wetland? **NO**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Depth (inches):
Water Table Present? Depth (inches):
Saturation Present? Depth (inches):
Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	**10YR 3/3**						**FINE SANDY LOAM**	
7-16+	**10YR 5/8**						**FINE SANDY LOAM**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **NO**

Remarks:
1" layer of duff

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W101B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Pinus strobus**	**38**	**X**	**FACU**
2. **Tsuga canadensis**	**15**	**X**	**FACU**
3. **Prunus serotina**	**15**	**X**	**FACU**
4.			
5.			
6.			
7.			
	68	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Pinus strobus**	**15**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Maianthemum canadense**	**20.5**	**X**	**FACU**
2. **Osmunda cinnamomea**	**10.5**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	31	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **6** (B)

% Dominants OBL, FACW, FAC: **17%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **10.5**	x 2 =	**21**
FAC	x 3 =	
FACU **103.5**	x 4 =	**414**
UPL	x 5 =	
Sum: **114** (A)		**435** (B)

Prevalence Index = B/A = **3.82**

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is > 50%
- ___ Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W102A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W102A**

Investigator(s): **RMS** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **N/A**

Subregion (LRR or MLRA): **LRR R** Lat: **43°36'49.2"N** Long: **73°13'25.833"W** Datum: **NAD 83**

Soil Map Unit: **Limerick silt loam** NWI Class: **PEM**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	Water Marks (B1)	X	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-0							**MUCK**	
0-3	**10YR 2/2**		**7.5YR 5/8**		**C**	**M**	**SILT LOAM**	
3-8	**2.5Y 4/2**		**5YR 3/4**		**C**	**M**	**SILT LOAM**	
8-16+	**10YR 2/1**						**SILT LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)		2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)				Coast Prairie Redox (A16) (LRR K, L, R)
	Black Histic (A3)		Thin Dark Surface (S9) (LRR R, MLRA 149B)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
X	Hydrogen Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)		Dark Surface (S9) (LRR K, L, M)
	Stratified Layers (A5)		Loamy Gleyed Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)
	Depleted Below Dark Surface (A11)	X	Depleted Matrix (F3)		Thin Dark Surface (S9) (LRR K, L)
	Thick Dark Surface (A12)		Redox Dark Surface (F6)		Iron-Manganese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)		Redox Depressions (F8)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)				Red Parent Material (F21)
	Stripped Matrix (S6)				Very Shallow Dark Surface (TF12)
	Dark Surface (S7) (LRR R, MLRA 149B)				Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W102A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Fraxinus pennsylvanica**	**38**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Symplocarpus foetidus**	**63**	**X**	**OBL**
2. **Onoclea sensibilis**	**20.5**	**X**	**FACW**
3. **Equisetum fluviatile**	**5**		**OBL**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	88.5	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **3** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**68**	x 1 = **68**
FACW	**58.5**	x 2 = **117**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**126.5** (A)	**185** (B)

Prevalence Index = B/A = **1.46**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W102B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W102B**

Investigator(s): **RMS** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **none** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°36'49.595"N** Long: **73°13'25.546"W** Datum: **NAD 83**

Soil Map Unit: **Windsor loamy sand** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present?	**NO**	
Wetland Hydrology Present?	**NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B13)	
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 (B7)	Other (Explain in Remarks)	
Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	**10YR 3/4**						**FINE SANDY LOAM**	
3-16	**10YR 4/4**						**FINE SANDY LOAM**	

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

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

Hydric Soil Indicators:

Histosol (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR K, L)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Stratified Layers (A5)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	
Sandy Gleyed Matrix (S4)		
Sandy Redox (S5)		
Stripped Matrix (S6)		
Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **NO**

Remarks:

1" layer of duff

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W102B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: _____ (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU	x 4 =	
UPL	x 5 =	
Sum: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-10A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/7/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-10A**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-2%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°37'25.044"N** Long: **73°11'26.18"W** Datum: **NAD 83**

Soil Map Unit: **Pinnebog Muck** NWI Class: **PEM/PSS**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)		Surface Soil Cracks (B6)
X	High Water Table (A2)		Aquatic Fauna (B13)		Drainage Patterns (B10)
X	Saturation (A3)		Marl Deposits (B13)	X	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 (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 (B7)		Other (Explain in Remarks)		Shallow Aquitard (D3)
	Sparsely Vegetated Concave Surface (B8)				Microtopographic Relief (D4)
					FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):		
Water Table Present?	X	Depth (inches):	**Surface**	Wetland Hydrology Present? **YES**
Saturation Present?	X	Depth (inches):	**Surface**	

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.24" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0							**MUCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-10A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1. **Acer rubrum**	**15**	**X**	**FAC**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Cornus racemosa**	**38**	**X**	**FAC**
2. **Alnus incana**	**15**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
	53	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Typha latifolia**	**93**	**X**	**OBL**
2. **Caltha palustris**	**3**		**OBL**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	96	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **4** (A)

Dominants across all strata: **4** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	**96**	x 1 =	**96**
FACW	**15**	x 2 =	**30**
FAC	**53**	x 3 =	**159**
FACU		x 4 =	
UPL		x 5 =	
Sum:	**164** (A)		**285** (B)

Prevalence Index = B/A = **1.74**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-10B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/7/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-10B**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **8-25%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°37'24.883"N** Long: **73°11'26.196"W** Datum: **NAD 83**

Soil Map Unit: **Taconic-Macomber complex** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**

Hydric Soil Present? **NO**

Wetland Hydrology Present? **NO**

Is This Sample Area Within a Wetland? **NO**

Remarks:

side slope/mowed

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? ___ Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.24" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 5/6**						**GRAVELLY LOAM**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-10B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Solidago canadensis**	**38**	**X**	**FACU**
2. **Pastinaca sativa**	**38**	**X**	**NI**
3. **Dactylis glomerata**	**38**	**X**	**FACU**
4. **Trifolium pratense**	**3**		**FACU**
5. **Taraxacum officinale**	**3**		**FACU**
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	120	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU **82**	x 4 =	**328**
UPL	x 5 =	
Sum: **82** (A)		**328** (B)

Prevalence Index = B/A = **4.00**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

#REF!

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-18A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/7/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-18A**
Investigator(s): **CMM** Section, Township, Range: **Castleton**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **N/A**
Subregion (LRR or MLRA): **LRR R** Lat: **43°37'0.905"N** Long: **73°10'5.127"W** Datum: **NAD 83**
Soil Map Unit: **Udorthents loamy** NWI Class: **PEM/PSS**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present? **YES**	
Wetland Hydrology Present? **YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	**Surface**
Saturation Present?	X	Depth (inches):	**Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.24" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12-0							**MUCK**	**Bedrock at 12"**

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: **Bedrock**
Depth (inches): **12**

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-18A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Salix bebbiana**	**38**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Caltha palustris**	**63**	**X**	**OBL**
2. **Phalaris arundinacea**	**15**		**FACW**
3. **Onoclea sensibilis**	**15**		**FACW**
4. **Heracleum mantegazzianum**	**3**		**FAC**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	96	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **2** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**63**	x 1 = **63**
FACW	**68**	x 2 = **136**
FAC	**3**	x 3 = **9**
FACU		x 4 =
UPL		x 5 =
Sum:	**134** (A)	**208** (B)

Prevalence Index = B/A = **1.55**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-18B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/7/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-18B**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **N/A**

Subregion (LRR or MLRA): **LRR R** Lat: **43°37'0.781"N** Long: **73°10'5.064"W** Datum: **NAD 83**

Soil Map Unit: **Udorthents loamy** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? ___ Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.24" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 4/1**						**SANDY LOAM**	
4-14	**10YR 6/2**						**GRAVELLY LOAM**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-18B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Rhus aromatica**	**38**	**X**	**UPL**
2. **Pinus strobus**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	53	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Solidago canadensis**	**63**	**X**	**FACU**
2. **Trifolium pratense**	**15**		**FACU**
3. **Taraxacum officinale**	**15**		**FACU**
4. **Equisetum arvense**	**3**		**FAC**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	96	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC **3**	x 3 =	**9**
FACU **108**	x 4 =	**432**
UPL **38**	x 5 =	**190**
Sum: **149** (A)		**631** (B)

Prevalence Index = B/A = **4.23**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-2A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-2A**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°36'58.91"N** Long: **73°9'12.984"W** Datum: **NAD 83**

Soil Map Unit: **Warwick-Quonset complex** NWI Class: **PEM/PSS**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present? **YES**	
Wetland Hydrology Present? **YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	1
Saturation Present?	X	Depth (inches):	Surface

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 2/1**						**SILT LOAM**	
6-14	**10YR 5/1**		**10YR 5/6**		**C**	**M**	**SILT LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)	X	Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-2A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Phalaris arundinacea**	**98**	**X**	**FACW**
2. **Onoclea sensibilis**	**15**		**FACW**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	113	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **1** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **113**	x 2 =	**226**
FAC	x 3 =	
FACU	x 4 =	
UPL	x 5 =	
Sum: **113** (A)		**226** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-2B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-2B**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°36'58.938"N** Long: **73°9'13.233"W** Datum: **NAD 83**

Soil Map Unit: **Warwick-Quonset complex** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B13)	
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 (B7)	Other (Explain in Remarks)	
Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 3/3**						**SILT LOAM**	

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

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

Hydric Soil Indicators:

Histosol (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR K, L)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Stratified Layers (A5)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	
Sandy Gleyed Matrix (S4)		
Sandy Redox (S5)		
Stripped Matrix (S6)		
Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: **Gravel**

Depth (inches): **4**

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-2B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Pastinaca sativa**	**38**	**X**	**NI**
2. **Phalaris arundinacea**	**15**	**X**	**FACW**
3. **Trifolium pratense**	**15**	**X**	**FACU**
4. **Vicia cracca tenuifolia**	**15**	**X**	**NI**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	83	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **4** (B)

% Dominants OBL, FACW, FAC: **25%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **15**	x 2 =	**30**
FAC	x 3 =	
FACU **15**	x 4 =	**60**
UPL	x 5 =	
Sum: **30** (A)		**90** (B)

Prevalence Index = B/A = **3.00**

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-8A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/7/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-8A**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°36'54.237"N** Long: **73°8'25.313"W** Datum: **NAD 83**

Soil Map Unit: **Warwick-Quonset complex** NWI Class: **PEM/PSS**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present? **YES**	
Wetland Hydrology Present? **YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)		Surface Soil Cracks (B6)
X	High Water Table (A2)		Aquatic Fauna (B13)	X	Drainage Patterns (B10)
X	Saturation (A3)		Marl Deposits (B13)		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 (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 (B7)		Other (Explain in Remarks)		Shallow Aquitard (D3)
	Sparsely Vegetated Concave Surface (B8)				Microtopographic Relief (D4)
					FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?		Depth (inches):		
Water Table Present?	X	Depth (inches):	Surface	Wetland Hydrology Present? **YES**
Saturation Present?	X	Depth (inches):	Surface	

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.24" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**						**SILT LOAM**	
6-14	**10YR 5/2**		**10YR 5/6**		**C**	**M**	**SILT LOAM**	

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

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)		2 cm Muck (A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)		Coast Prairie Redox (A16) (LRR K, L, R)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)		Dark Surface (S9) (LRR K, L, M)
	Stratified Layers (A5)	X	Depleted Matrix (F3)		Polyvalue Below Surface (S8) (LRR K, L)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)		Thin Dark Surface (S9) (LRR K, L)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)		Iron-Manganese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)		Piedmont Floodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)				Red Parent Material (F21)
	Stripped Matrix (S6)				Very Shallow Dark Surface (TF12)
	Dark Surface (S7) (LRR R, MLRA 149B)				Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-8A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Acer rubrum**	**15**	**X**	**FAC**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Cornus sericea**	**38**	**X**	**FACW**
2. **Salix discolor**	**15**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
	53	= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Phalaris arundinacea**	**63**	**X**	**FACW**
2. **Matteuccia struthiopteris**	**38**	**X**	**FAC**
3. **Onoclea sensibilis**	**15**		**FACW**
4. **Glyceria grandis**	**15**		**OBL**
5. **Equisetum pratense**	**15**		**FACW**
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	146	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **5** (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**15**	x 1 = **15**
FACW	**146**	x 2 = **292**
FAC	**53**	x 3 = **159**
FACU		x 4 =
UPL		x 5 =
Sum:	**214** (A)	**466** (B)

Prevalence Index = B/A = **2.18**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-8B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/7/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-8B**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°36'54.419"N** Long: **73°8'25.235"W** Datum: **NAD 83**

Soil Map Unit: **Warwick-Quonset complex** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**

Hydric Soil Present? **NO**

Wetland Hydrology Present? **NO**

Is This Sample Area Within a Wetland? **NO**

Remarks:

mowed slope along edge of ROW

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.24" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 5/4**						**SANDY LOAM**	
8-14	**10YR 6/4**						**SANDY LOAM**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: **Gravel**

Depth (inches): **14**

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-8B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Pastinaca sativa**	**38**	**X**	**NI**
2. **Trifolium pratense**	**15**	**X**	**FACU**
3. **Taraxacum officinale**	**15**	**X**	**FACU**
4. **Vicia cracca tenuifolia**	**15**	**X**	**NI**
5. **Phleum pratense**	**15**	**X**	**FACU**
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	98	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU **45**	x 4 =	**180**
UPL	x 5 =	
Sum: **45** (A)		**180** (B)

Prevalence Index = B/A = **4.00**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-1A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-1A**
Investigator(s): **CMM** Section, Township, Range: **Castleton**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **25-80%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°37'0.067"N** Long: **73°8'6.159"W** Datum: **NAD 83**
Soil Map Unit: **Macomber-Taconic complex** NWI Class: **PEM/PSS**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **YES**
Hydric Soil Present? **YES**
Wetland Hydrology Present? **YES**
Is This Sample Area Within a Wetland? **YES**

Remarks:

HYDROLOGY

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

- ( ) Surface Water (A1)
- (X) High Water Table (A2)
- (X) Saturation (A3)
- ( ) Water Marks (B1)
- ( ) Sediment Deposits (B2)
- ( ) Drift Deposits (B3)
- ( ) Algal Mat or Crust (B4)
- ( ) Iron Deposits (B5)
- ( ) Inundation Visible on Aerial (B7)
- ( ) Sparsely Vegetated Concave Surface (B8)
- ( ) Water-Stained Leaves (B9)
- ( ) Aquatic Fauna (B13)
- ( ) Marl Deposits (B13)
- ( ) Hydrogen Sulfide Odor (C1)
- ( ) Oxidized Rhizospheres on Living Roots (C3)
- ( ) Presence of Reduced Iron (C4)
- ( ) Recent Iron Reduction in Tilled Soils (C6)
- ( ) Thin Muck Surface (C7)
- ( ) Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ( ) Surface Soil Cracks (B6)
- (X) Drainage Patterns (B10)
- ( ) Moss Trim Lines (B16)
- ( ) Dry-Season Water Table (C2)
- ( ) Crayfish Burrows (C8)
- ( ) Saturation Visible on Aerial (C9)
- ( ) Stunted or Stressed Plants (D1)
- ( ) Geomorphic Position (D2)
- ( ) Shallow Aquitard (D3)
- ( ) Microtopographic Relief (D4)
- ( ) FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? ( ) Depth (inches):
Water Table Present? (X) Depth (inches): **Surface**
Saturation Present? (X) Depth (inches): **Surface**
Wetland Hydrology Present? **YES**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 5/1**		**10YR 5/6**		**C**	**M**	**SILT LOAM**	
6-12	**10YR 6/1**		**10YR 5/8**		**C**	**M**	**CLAY LOAM**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
[2]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) (LRR R, MLRA 149B)
- ( ) Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ( ) Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ( ) Loamy Mucky Mineral (F1) (LRR K, L)
- ( ) Loamy Gleyed Matrix (F2)
- (X) Depleted Matrix (F3)
- ( ) Redox Dark Surface (F6)
- ( ) Depleted Dark Surface (F7)
- ( ) Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type:
Depth (inches):
Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-1A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Spiraea alba**	**15**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Phalaris arundinacea**	**98**	**X**	**FACW**
2. **Onoclea sensibilis**	**15**		**FACW**
3. **Veratrum viride**	**15**		**FACW**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	128	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **2** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **143**	x 2 =	**286**
FAC	x 3 =	
FACU	x 4 =	
UPL	x 5 =	
Sum: **143** (A)		**286** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-CN-W-1B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/5/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-CN-W-1B**

Investigator(s): **CMM** Section, Township, Range: **Castleton**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): Slope (%): **25-80%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°37'0.435"N** Long: **73°8'6.163"W** Datum: **NAD 83**

Soil Map Unit: **Macomber-Taconic complex** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.61" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	**10YR 5/4**						**CLAY LOAM**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: **Gravel**

Depth (inches): **7**

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-CN-W-1B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Carpinus caroliniana**	**38**	**X**	**FAC**
2. **Pinus strobus**	**38**	**X**	**FACU**
3. **Acer saccharinum**	**15**		**FACW**
4.			
5.			
6.			
7.			
	91	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Carpinus caroliniana**	**15**	**X**	**FAC**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Erythronium rostratum**	**38**	**X**	**FACU**
2. **Fragaria virginiana**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	53	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **5** (B)

% Dominants OBL, FACW, FAC: **40%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **15**	x 2 =	**30**
FAC **53**	x 3 =	**159**
FACU **91**	x 4 =	**364**
UPL	x 5 =	
Sum: **159** (A)		**553** (B)

Prevalence Index = B/A = **3.48**

Hydrophytic Vegetation Indicators:

- ____ Dominance Test is > 50%
- ____ Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Ira Sampling Date: 5/15/14

Applicant/Owner: TDI State: VT Sampling Point: t-ir-wl-A

Investigator(s): AF SC Section, Township, Range: ______

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR or MLRA): ______ Lat: 43.612981 Long: -73.079307 Datum: NAD83

Soil Map Unit Name: 22 NWI classification: PSS

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

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? NO (If needed, explain any answers in Remarks.)

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

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

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

. Restricted by railroad

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ______

Water Table Present? Yes ___ No ✓ Depth (inches): ______

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: tirw1A

Tree Stratum (Plot size: —)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Cornus amomum	33	✓	FACW
2. Salix nigra	5	✓	OBL
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Lythrum Salicaria	75	✓	OBL
2. Scirpus cyperinus	15		
3. Phalaris arundinacea	20	✓	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: —)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No ____

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

No.395

SOIL

Sampling Point: tirw1A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y 5/1	90	2.5Y 6/6	10	C	M	SiLo	
6-16	2.5Y 5/1	80	2.5Y 6/6	20	C	M	SiLo	

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ____

Remarks:

No.385

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Ira Sampling Date: 5/15/14

Applicant/Owner: TDI State: VT Sampling Point: t-65-WL-B

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): Convex Slope (%): 5

Subregion (LRR or MLRA): Lat: 43.612981 Long: -73.079307 Datum: NAD 83

Soil Map Unit Name: 97C NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

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

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

Regularly mowed

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: TrW18

Tree Stratum (Plot size: —)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: —)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Agrostis sp.	90	✓	—
2. Vicia caracca	5	✓	NI
3. Solidago canadensis	10	✓	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: —)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ___ No ✓

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

SOIL

Sampling Point: tirwB

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10yR 3/2	100					Silo	
5+	Restrictive							

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Stony refusal

Depth (inches): 5+

Hydric Soil Present? Yes ____ No ✓

Remarks:

Edge of highway fill

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDF City/County: West Rutland Sampling Date: 5/14/14

Applicant/Owner: TDF State: VT Sampling Point: TWCWWA

Investigator(s): AF SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): pit/mound Slope (%): 0

Subregion (LRR or MLRA): _____ Lat: 43.605976 Long: -73.069823 Datum: NAD83

Soil Map Unit Name: 96 NWI classification: PSS

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

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

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

Floodplain of Castleton R. between Rt. 4 and RR.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ✓ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓ No _____	Depth (inches):	2
Water Table Present?	Yes ✓ No _____	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ✓ No _____	Depth (inches):	0

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

Tin Mt Rain

VEGETATION – Use scientific names of plants.

Sampling Point: tmw 11 A

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: –)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Salix nigra	33	✓	OBL
2. Viburnum/ dentatum	20	✓	FAC
3. Cornus stolonifera	50	✓	FACW
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Typha latifolia	2		OBL
2. Equisetum fluviatil	5		
3. Carex stipatea	66	✓	OBL
4. Phragmites australis	5		
5. Carex Stricta	10		
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30)			
1. Vitis riparia	10		
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No _____

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

No.395

SOIL

Sampling Point: twrwl A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	2.5Y 2/1	100					Sapric	
10-13	2.5Y 5/1	90	2.5Y 6/1	10	D	M	Gr Sabo	
13+	Restrictive							

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Stony refusal

Depth (inches): 13+

Hydric Soil Present? Yes ✓ No ___

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: West Rutland Sampling Date: 5/14/14

Applicant/Owner: TDI State: VT Sampling Point: twr wu B

Investigator(s): AF SC Section, Township, Range: ______

Landform (hillslope, terrace, etc.): road shoulder Local relief (concave, convex, none): convex Slope (%): 45

Subregion (LRR or MLRA): ______ Lat: 43.605976 Long: -73.069823 Datum: NAD 83

Soil Map Unit Name: 96 NWI classification: ______

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

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? NO (If needed, explain any answers in Remarks.)

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

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

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

Steep road shoulder off Hwy

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No ✓	Depth (inches): ______	
Water Table Present?	Yes ___	No ✓	Depth (inches): ______	Wetland Hydrology Present? Yes ___ No ✓
Saturation Present? (includes capillary fringe)	Yes ___	No ✓	Depth (inches): ______	

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

Remarks:

Transect B

VEGETATION – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Betula lenta			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Rhus typhina	66	✓	NI
2. Rubus idaeus	90	✓	FACU
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5')			
1. Heracleum maximum	66	✓	FAC
2. Solidago sp.	25	✓	—
3. Vicia Caracca	25	✓	NI
4. Daucus carota	10		
5. Carex restrata	2		
6. Agrostis sp.	50	✓	—
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: ~)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No ✓

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

No.395

SOIL

Sampling Point: twrwllB

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100					Loam	
9+	Restrictive							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):
Type: Stony refusal
Depth (inches): 9+

Hydric Soil Present? Yes ___ No ✓

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: West Rutland Sampling Date: 5/12/14

Applicant/Owner: TDI State: VT Sampling Point: TWRW5A

Investigator(s): AF SC Section, Township, Range: ___

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Swale Slope (%): 10

Subregion (LRR or MLRA): ___ Lat: 43.597636 Long: -73.057029 Datum: NAD 83

Soil Map Unit Name: 42C NWI classification: PSS

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

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

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? No (If needed, explain any answers in Remarks.)

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

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

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

Top of blasted cliff

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✓ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No ___	Depth (inches): 0	
Water Table Present?	Yes ✓	No ___	Depth (inches): 0	
Saturation Present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches): 0	Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

...in the Rain

VEGETATION – Use scientific names of plants.

Sampling Point: TWRIVSA

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Spirea alba	1	✓	FACW
2. Fraxinus pennsylvanica	10	✓	FACW
3. Cornus stolonifera	2	✓	FACW
4. Carpinus caroliniana	10	✓	FAC
5. Prunus virginiana	5	✓	FACU
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Onoclea sensibilis	20	✓	FACW
2. Arisaema triphyllum	2	✓	FAC
3. Equisetum arvense	1	-	FAC
4. Osmunda claytonia	5	✓	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 89 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No ___

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

No.395

SOIL

Sampling Point: TWRWSA

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	2.5Y3/2	100					Muck	
2-8	2.5Y4/1	90	2.5Y6/1	10	D	M	SaLo	
8	Restrictive L							

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Stony refusal

Depth (inches): 8

Hydric Soil Present? Yes ✓ No ___

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

5/12/14

Project/Site: TDI City/County: West Rutland Sampling Date: TURN5B

Applicant/Owner: TDI State: VT Sampling Point:

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): undulating Slope (%): 15

Subregion (LRR or MLRA): Lat: 43.597636 Long: -73.057809 Datum: NAD 83

Soil Map Unit Name: 42C NWI classification:

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

TWRW5B
Sampling Point: _____

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30ft)			
1. Betula lenta	25	✓	FACU
2. Betula papyrifera	20	✓	FACU
3. Fraxinus Americana	10	✓	FACU
4. Acer saccharum	10	✓	FACU
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 1)			
1. Corylus cornuta	20	✓	FACU
2. Carpinus Caroliniana	25	✓	FAC
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Polystichum acrostichoides	33	✓	FACU
2. Osmunda claytonia	10	✓	FAC
3. Erythronium (Americanum)	2	✓	NI
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
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: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No ✓

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

No.395

OIL

Sampling Point: TWRWSB

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 4/4	100					FSaLo	
8+	Restrictive							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Stony refusal

Depth (inches): 8

Hydric Soil Present? Yes _____ No ✓

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDE City/County: West Rutland Sampling Date: 5/8/14

Applicant/Owner: TDI State: VT Sampling Point: TWRW2A

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Pit/Mound Slope (%): 8

Subregion (LRR or MLRA): Lat: 43.539812 Long: -73.024781 Datum: NAD83

Soil Map Unit Name: 67C NWI classification: PFO

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ✓ No ____

Hydric Soil Present? Yes ✓ No ____

Wetland Hydrology Present? Yes ✓ No ____

Is the Sampled Area within a Wetland? Yes ✓ No ____

If yes, optional Wetland Site ID: ____

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

Forested seep channelizing into 3 intermittent streams

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✓ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ✓ No ____ Depth (inches): 6

Saturation Present? (includes capillary fringe) Yes ✓ No ____ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No ____

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

Remarks: Seep

In the Rain

VEGETATION – Use scientific names of plants.

Sampling Point: TWRW2A

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30)			
1. Betula lenta	10	✓	FACU
2. Betula allaganiensis	5		
3. Acer rubrum	80	✓	FAC
4. Pinus Strobus	80	✓	FACU
5.			
6.			
7.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 15)			
1. Betula allaganiensis	10	✓	FACW
2. Hammamelis virginiana	10	✓	FACU
3.			
4.			
5.			
6.			
7.			
= Total Cover			
Herb Stratum (Plot size: 5)			
1. Equisetum Fluviatile	1	✓	OBL
2. Lysimachia nummularia	5	✓	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
= Total Cover			
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
= Total Cover			

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No ___

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

No.395

TWRW2A

OIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5Y 3/2	100					SaLo	
8-12	2.5Y 4/2	85	2.5Y 6/1	15	D	M	SaLo	
12+								restrictive layer

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: rocky

Depth (inches): 12

Hydric Soil Present? Yes ✓ No _____

Remarks:

See the Report

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: T-01 City/County: West Rutland Sampling Date: 2/18/14

Applicant/Owner: FDE State: _____ Sampling Point: TWRN2B

Investigator(s): AF SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): pit/mound Slope (%): 8

Subregion (LRR or MLRA): _____ Lat: 43.598812 Long: -73.024781 Datum: NAD 83

Soil Map Unit Name: 67C NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.)

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

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

Remarks:

TWRW2B

Sampling Point: _____

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	15	✓	FAC
2. Pinus Strobus	20	✓	FACU
3. Betula lenta	20	✓	FACU
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Fagus grandifolia	5	✓	FACU
2. Berberis thunbergii	5	✓	FACU
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5)			
1. Polystichum acrostichoides	20	✓	FACU
2. Erythronium americanum	10	✓	NI
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

Woody Vine Stratum (Plot size: NA)			
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: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 17 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No ✓

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

No.395

TWRW28

OIL

Sampling Point: _____

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR3/2	100					SiLo	
7-14	10YR4/3	100					SaLo	
14+								restrictive layer

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 14+

Hydric Soil Present? Yes _____ No ✓

Remarks:

Use in the field

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TD2 City/County: Rutland Sampling Date: 5/9/14

Applicant/Owner: TDI State: VT Sampling Point: TRWP1A

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): pit+mound Slope (%): 3

Subregion (LRR or MLRA): Lat: 43.592170 Long: -73.010934 Datum: NAD83

Soil Map Unit Name: 67B NWI classification: PFO1Rem

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? NS Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

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

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

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

Forested seep into phrag. stand, adjacent to HWY.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No ✓	Depth (inches): ____	
Water Table Present?	Yes ✓ No ___	Depth (inches): 3 11	
Saturation Present? (includes capillary fringe)	Yes ✓ No ___	Depth (inches): 0	Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

Fin the Plain

VEGETATION – Use scientific names of plants.

Sampling Point: TRUWSA

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	15	✓	FAC
2. Fraxinus pennsylvanica	10		
3. Betula lenta	25	✓	FACU
4. Ostrya virginiana	20	✓	FACU
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Fraxinus nigra	10	✓	FACW
2. Betula alleghaniensis	15	✓	FACW
3. Fraxinus pensylvanica	5	✓	FAC
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5)			
1. Equisetum fluvetale	3		
2. Onoclea sensibilis	25	✓	FACW
3. Impatiens capensis	40	✓	FACW
4. Heracleum maximum	15		
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No

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

No.395

SOIL

Sampling Point: TRW8A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	2.5Y2/1	100					Sapric	
9+	5Y4/3	100					Lo. VFS	

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ____

Remarks:

Data in the Rain

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Rutland Sampling Date: 5/9/14

Applicant/Owner: TDI State: VT Sampling Point: FR(UW)B

Investigator(s): AFSC Section, Township, Range:

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5

Subregion (LRR or MLRA): Lat: 43.572170 Long: -73.010934 Datum: NAD83

Soil Map Unit Name: 67B NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

TRWTB

Sampling Point: _____

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer Rubrum	30	✓	FAC
2. Fagus grandifolia	15		FACU
3. Fraxinus americana	10		FACU
4. Betula allegheniensis	25	✓	FAC*
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Fagus grandifolia	35	✓	FACU
2. Berberis thunbergii	2	✓	FACU
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Erythronium americanum	15	✓	NI
2. Polystichum acrostichoides	2	✓	FACU
3. Equisetum arvense	1	✓	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
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: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 56	x 3 = 168
FACU species 54	x 4 = 216
UPL species 0	x 5 = 0
Column Totals: 110 (A)	384 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No ✓

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

No.395

OIL

Sampling Point: TRUW88

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Loam	
5-12	10YR 4/4						Loam	
12-19	10YR 5/4	100					Silo	

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: N/A

Depth (Inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Use in the Region

No.385

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Rutland Sampling Date: 7/1/14

Applicant/Owner: TDI State: VT Sampling Point: TRUW3 A

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): Flood Plain Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): Lat: 43.582689 Long: -72.981269 Datum: NAD83

Soil Map Unit Name: 22 NWI classification: PFO

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

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

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

E Floodplain of otter creek backwater

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ✓ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓ No ____	Depth (inches):	18
Water Table Present?	Yes ✓ No ____	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ✓ No ____	Depth (inches):	0

Wetland Hydrology Present? Yes ✓ No ____

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

Remarks:

TRUW3

VEGETATION – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	25	✓	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Cornus stolonifera	15	✓	FACW
2. Lonicera tatarica	5	✓	FACU
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5)			
1. Calamagrostis canadensis	50	✓	OBL
2. Onoclea sensibilis	25	✓	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	= 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 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No ____

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

No.395

SOIL

Sampling Point: TRWW3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5Y 3/2	100					Loam	
8-16	2.5Y 5/2	75	10YR 5/6	25	C	M	SiLo	

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: N/P

Depth (inches): _____

Hydric Soil Present? Yes ✓ No _____

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Rutland Sampling Date: 5/7/14

Applicant/Owner: TDI State: VT Sampling Point: TRN WB

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): Road shoulder Local relief (concave, convex, none): none Slope (%): 15

Subregion (LRR or MLRA): Lat: 43.582689 Long: -72.981289 Datum: NAD 83

Soil Map Unit Name: 22 NWI classification:

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No ____

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

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

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

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

Route 4 shoulder

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

In the Rain

TRCW3B

VEGETATION – Use scientific names of plants.

Sampling Point: B

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ✓)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Lonicera tatarica	15	✓	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Galium sp.	8		
2. Cow parsnip	20	✓	FACW
3. Dandelion	20	✓	FACU
4. Phleum pratense	25	✓	FACU
5. Solidago canadensis	30	✓	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No ✓

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

No.395

OIL

Sampling Point: TRWW3B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/4	100					SiLo	fill
5-12	10YR 4/3	100					Lo Si	fill
12+	10YR 4/4	100					Lo Si	fill

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: W/O

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Rutland Sampling Date: 5/7/04

Applicant/Owner: TDI State: VT Sampling Point: T-TU-WI-A

Investigator(s): AF SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 0-5

Subregion (LRR or MLRA): _____ Lat: 43.577061 Long: -72.961059 Datum: NAD83

Soil Map Unit Name: 66B NWI classification: PEM

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

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

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

Dominated by phragmites

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No ___	Depth (inches): _____
Water Table Present?	Yes ___	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

Tim the Rain

VEGETATION – Use scientific names of plants.

Sampling Point: 1-rv-AH-4

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

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

Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species?	Indicator Status
1. Phragmites australis	100	✓	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: ______)	Absolute % Cover	Dominant Species?	Indicator Status
1. Vitus labrusca	5	✓	FACU
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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	100	x 1 = 100
FACW species		x 2 =
FAC species	5	x 3 = 15
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	105 (A)	115 (B)

Prevalence Index = B/A = 1.1

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No ____

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

No.395

SOIL

Sampling Point: tfu-wl-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y 3/2	100					FSL	
6-15	5Y 5/3	90	10YR5/8	10	C	M	LFS	
15+	5Y 6/2	90	10YR5/8	10	C	M	LFS	

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: NO

Depth (inches): ______

Hydric Soil Present? Yes ✓ No ___

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Rutland Sampling Date: 4-ru-w1-B

Applicant/Owner: TDI State: VT Sampling Point: 5/7/14

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none Slope (%): 5

Subregion (LRR or MLRA): Lat: 43.577061 Long: -72.966059 Datum: NAD83

Soil Map Unit Name: 66B NWI classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)
Forested Adjacent to car dealership

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

+-PU-W1-B

VEGETATION – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus strobus	5	✓	FACU
2. Prunus Serotina	5	✓	FACU
3. Acer platanoides	5	✓	UPL
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus Cathartica	2	✓	FAC
2. Lonicera tatarica	10	–	FACU
3. Syringa vulgaris	10	✓	NI
4. Elaegnus umbellata	5	✓	NI
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5')			
1. Solidago canadensis	75	✓	FAW
2. Verbascum maximum	10		
3. Agrostis sp.	20	✓	—
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

Woody Vine Stratum (Plot size: 15')			
1. Vitis riparia	10	✓	FAC
2. Celastrus orbiculatus	10	✓	UPL
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: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No ✓

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

No.395

SOIL

Sampling Point: t-ru-wl-B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100					SaLo	
9-11	10YR 4/3	100					LoSa	
11+								Stony refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Stony

Depth (inches): 11

Hydric Soil Present? Yes ____ No ✓

Remarks:

No.395

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Clarendon Sampling Date: 5/6/14
Applicant/Owner: TDI State: VT Sampling Point: TCLW7A
Investigator(s): AF SC Section, Township, Range:
Landform (hillslope, terrace, etc.): undulating Local relief (concave, convex, none): Slight Slope (%): 0
Subregion (LRR or MLRA): Lat: 43.558418 Long: -72.964231 Datum:
Soil Map Unit Name: 68A NWI classification: PFO1PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? no (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)
Drains through culvert under RT 4

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No ____	Depth (inches):	
Water Table Present?	Yes ✓ No ____	Depth (inches): 0	
Saturation Present? (includes capillary fringe)	Yes ✓ No ____	Depth (inches): 0	Wetland Hydrology Present? Yes ✓ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: TCLW7A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix (unspecified)	20	✓	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Cornus stolonifera	20	✓	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5)			
1. Typha latifolia	20	✓	OBL
2. Calamagrostis canadensis	40	✓	OBL
3. Impatiens capensis	33	✓	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No ____

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

No.395

SOIL

Sampling Point: TCLW7 A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y 2/1	100					FSL	
6-16	2.5Y 5/2	100					VFSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: N/0

Depth (inches): ___

Hydric Soil Present? Yes ✓ No ___

Remarks:

...in the Rain.

No.395

Flag 12

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Clarendon Sampling Date: 5/6/14

Applicant/Owner: TDI State: VT Sampling Point: TCLW7-U

Investigator(s): AE SC Section, Township, Range:

Landform (hillslope, terrace, etc.): undulating Local relief (concave, convex, none): Swale Slope (%): 0-5

Subregion (LRR or MLRA): Lat: 43.558418 Long: -72.964231 Datum:

Soil Map Unit Name: 68A NWI classification: P

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? no Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? no (If needed, explain any answers in Remarks.)

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

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

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

Toe of highway fill

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

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

Remarks:

If in the Riparian

TCLW7B

VEGETATION – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus rigida	70	✓	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Lonicera morrowii	10		FACU
2. Sorbus aMonum	60	✓	FACW
3. Rhamnus cathartica	15		FAC
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5)			
1. Onoclea sensibilis	20	✓	FACW
2. Solidago canadensis	80	✓	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

Woody Vine Stratum (Plot size: _____)			
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: 4 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	86	x 2 =	172
FAC species	15	x 3 =	45
FACU species	80	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	181 (A)		317 (B)

Prevalence Index = B/A = 2.1

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No _____

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

No.395

SOIL

Sampling Point: TGL W7 B

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					FSL	
5-14	10YR 4/3	100					Si Lo	
14-20	2.5Y 4/2	75	10YR 4/6	25	C	M	Si Lo	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: W/B

Depth (inches): _____

Hydric Soil Present? Yes ✓ No _____

Remarks:

In the Rain.

No.395

TCLW1

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TDI City/County: Clarendon Sampling Date: 5/6/14
Applicant/Owner: TDI State: VT Sampling Point: TCLW1A
Investigator(s): AF SC Section, Township, Range:
Landform (hillslope, terrace, etc.): undulating Local relief (concave, convex, none): Swale Slope (%): 5
Subregion (LRR or MLRA): Lat: 43.545186 Long: -72.959737 Datum: NAD83
Soil Map Unit Name: 67B NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)
Mowed, VELCO Row

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____ No ____	Depth (inches): ____	
Water Table Present?	Yes ____ No ____	Depth (inches): ____	
Saturation Present? (includes capillary fringe)	Yes ✓ No ____	Depth (inches): 0"	Wetland Hydrology Present? Yes ✓ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: TCLW1A

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Spiraea latifolia	33	FV ✓	FAC
2. Lonicera Morrowii	5		
3. Salix sitka	15		
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: _____)			
1. Oncolea sensibilis	25	FACW ✓	FACW
2. Solidago canadensis	10		
3. Phalaris arundinacea	50	FACW	FACW
4. Ranunculus sp.	1		
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
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 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ✓ No _____

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

No.395

SOIL

Sampling Point: TCLW1A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	2.5Y 3/2	100					FSL	
7-18	2.5Y 4/2	75	10YR 4/6	25	C	M	FSL	

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: N/D

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ____

Remarks:

No.385

TCLW1

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: TPI City/County: Clarendon Sampling Date: 5/6/14

Applicant/Owner: TPI State: VT Sampling Point: TCLW1 B

Investigator(s): AF SC Section, Township, Range:

Landform (hillslope, terrace, etc.): undulating Local relief (concave, convex, none): Road Shoulder Slope (%): 5

Subregion (LRR or MLRA): Lat: 43.545186 Long: -72.959131 Datum: NAD 83

Soil Map Unit Name: 67B NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? no Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? no (If needed, explain any answers in Remarks.)

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

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

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

Road Shoulder - fill

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

In the Rain

VEGETATION – Use scientific names of plants.

Sampling Point: TCLW1B

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Galium Sp.	10		
2. Phalaris arundinacea	10		
3. Rubus procaze	75	✓	FACU
4. Heracleum Maximum	5		
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No ✓

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

No. 395

SOIL

Sampling Point: TCLW18

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					FSL	
8-16	10YR 4/3	100					FSL	

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: NO

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Tim the Rain...

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-SH-W-5A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/28/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-SH-W-5A**
Investigator(s): **CMM** Section, Township, Range: **Shrewsbury**
Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-3%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°30'4.05"N** Long: **72°53'54.323"W** Datum: **NAD 83**
Soil Map Unit: **Sudbury fine sandy loam** NWI Class: **PEM**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	**Surface**
Saturation Present?	X	Depth (inches):	**Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 1.23" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
8-0							**MUCK**	
0+							**BEDROCK**	

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: **Bedrock**
Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-SH-W-5A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Phalaris arundinacea**	**98**	**X**	**FACW**
2. **Typha latifolia**	**38**	**X**	**OBL**
3. **Onoclea sensibilis**	**15**		**FACW**
4. **Acorus americanus**	**15**		**OBL**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	166	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **2** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**53**	x 1 = **53**
FACW	**113**	x 2 = **226**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**166** (A)	**279** (B)

Prevalence Index = B/A = **1.68**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-SH-W-5B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/28/2014**
Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-SH-W-5B**
Investigator(s): **CMM** Section, Township, Range: **Shrewsbury**
Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **0-3%**
Subregion (LRR or MLRA): **LRR R** Lat: **43°30'3.971"N** Long: **72°53'54.458"W** Datum: **NAD 83**
Soil Map Unit: **Sudbury fine sandy loam** NWI Class: **Upland**
Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**
Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present?	**NO**	
Wetland Hydrology Present?	**NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? ___ Depth (inches): ___
Water Table Present? ___ Depth (inches): ___
Saturation Present? ___ Depth (inches): ___

Wetland Hydrology Present? **NO**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 1.23" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 4/3**						**SILT LOAM**	
8+							**BEDROCK**	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) (LRR R, MLRA 149B)
- ___ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ___ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ___ Loamy Mucky Mineral (F1) (LRR K, L)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):
Type: **Bedrock**
Depth (inches): **8**

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-SH-W-5B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Rubus idaeus**	**15**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Solidago canadensis**	**38**	**X**	**FACU**
2. **Phalaris arundinacea**	**15**	**X**	**FACW**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	53	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **1** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **33%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL		x 1 =
FACW	**15**	x 2 = **30**
FAC		x 3 =
FACU	**53**	x 4 = **212**
UPL		x 5 =
Sum:	**68** (A)	**242** (B)

Prevalence Index = B/A = **3.56**

Hydrophytic Vegetation Indicators:

- ____ Dominance Test is > 50%
- ____ Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-SH-W-2A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/28/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-SH-W-2A**

Investigator(s): **CMM** Section, Township, Range: **Shrewsbury**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-4%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°29'25.88"N** Long: **72°53'5.386"W** Datum: **NAD 83**

Soil Map Unit: **Deerfield loamy sand** NWI Class: **PEM/PFO**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	**Surface**
Saturation Present?	X	Depth (inches):	**Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 1.23" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16-0							**MUCK**	

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

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-SH-W-2A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Acer saccharinum**	**38**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	38	= Total Cover	

Sapling Stratum (Plot size: **30' RADIUS**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Spiraea alba**	**15**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Herb Stratum (Plot size: **5' RADIUS**)			
1. **Onoclea sensibilis**	**63**	**X**	**FACW**
2. **Impatiens capensis**	**15**		**FACW**
3. **Matteuccia struthiopteris**	**15**		**FAC**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	93	= Total Cover	

Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **3** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW **131**	x 2 =	**262**
FAC **15**	x 3 =	**45**
FACU	x 4 =	
UPL	x 5 =	
Sum: **146** (A)		**307** (B)

Prevalence Index = B/A = **2.10**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-SH-W-2B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/28/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-SH-W-2B**

Investigator(s): **CMM** Section, Township, Range: **Shrewsbury**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **0-4%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°29'25.932"N** Long: **72°53'5.581"W** Datum: **NAD 83**

Soil Map Unit: **Deerfield loamy sand** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present?	**NO**	
Wetland Hydrology Present?	**NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B13)	
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 (B7)	Other (Explain in Remarks)	
Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 1.23" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 4/3**						**SILT LOAM**	

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

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

Hydric Soil Indicators:

Histosol (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR K, L)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Stratified Layers (A5)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	
Sandy Gleyed Matrix (S4)		
Sandy Redox (S5)		
Stripped Matrix (S6)		
Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-SH-W-2B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Rubus idaeus**	**15**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Solidago canadensis**	**38**	**X**	**FACU**
2. **Symphyotrichum novae-angliae**	**15**	**X**	**FACW**
3. **Phalaris arundinacea**	**15**	**X**	**FACW**
4. **Onoclea sensibilis**	**3**		**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	71	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **2** (A)

Dominants across all strata: **4** (B)

% Dominants OBL, FACW, FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL		x 1 =
FACW	**33**	x 2 = **66**
FAC		x 3 =
FACU	**53**	x 4 = **212**
UPL		x 5 =
Sum:	**86** (A)	**278** (B)

Prevalence Index = B/A = **3.23**

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is > 50%
- ___ Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WA-W-3A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WA-W-3A**

Investigator(s): **CMM** Section, Township, Range: **Wallingford**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°28'30.185"N** Long: **72°52'31.5"W** Datum: **NAD 83**

Soil Map Unit: **Sudbury fine sandy loam** NWI Class: **PEM/PSS**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

Mapped VSWI

HYDROLOGY

Wetland Hydrology Indicators:

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

	Surface Water (A1)		Water-Stained Leaves (B9)
X	High Water Table (A2)		Aquatic Fauna (B13)
X	Saturation (A3)		Marl Deposits (B13)
	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 (B7)		Other (Explain in Remarks)
	Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

	Surface Soil Cracks (B6)
	Drainage Patterns (B10)
	Moss Trim Lines (B16)
	Dry-Season Water Table (C2)
	Crayfish Burrows (C8)
	Saturation Visible on Aerial (C9)
	Stunted or Stressed Plants (D1)
	Geomorphic Position (D2)
	Shallow Aquitard (D3)
	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?		Depth (inches):	
Water Table Present?	X	Depth (inches):	**Surface**
Saturation Present?	X	Depth (inches):	**Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18							**MUCK**	

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

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

Hydric Soil Indicators:

X	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WA-W-3A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Salix bebbiana**	**15**	**X**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: 5' RADIUS)			
1. **Acorus americanus**	**63**	**X**	**OBL**
2. **Typha latifolia**	**38**	**X**	**OBL**
3. **Onoclea sensibilis**	**15**		**FACW**
4. **Carex aquatilis**	**15**		**OBL**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	131	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **3** (A)

Dominants across all strata: **3** (B)

% Dominants OBL, FACW, FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	**116**	x 1 = **116**
FACW	**30**	x 2 = **60**
FAC		x 3 =
FACU		x 4 =
UPL		x 5 =
Sum:	**146** (A)	**176** (B)

Prevalence Index = B/A = **1.21**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WA-W-3B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WA-W-3B**

Investigator(s): **CMM** Section, Township, Range: **Wallingford**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex** Slope (%): **3-8%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°28'30.198"N** Long: **72°52'31.357"W** Datum: **NAD 83**

Soil Map Unit: **Sudbury fine sandy loam** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? **NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present? **NO**	
Wetland Hydrology Present? **NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? ___ Depth (inches): ___

Water Table Present? ___ Depth (inches): ___

Saturation Present? Depth (inches): ___

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10R 3/3**						**SILTY CLAY LOAM**	
6-14	**10YR 5/3**						**SILTY CLAY LOAM**	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WA-W-3B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30' RADIUS)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 15' RADIUS)			
1. **Lonicera morrowii**	**38**	**X**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
	38 = Total Cover		
Herb Stratum (Plot size: 5' RADIUS)			
1. **Solidago canadensis**	**38**	**X**	**FACU**
2. **Taraxacum officinale**	**15**	**X**	**FACU**
3. **Cirsium arvense**	**15**	**X**	**FACU**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	68 = Total Cover		
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: _____ (A)

Dominants across all strata: **4** (B)

% Dominants OBL, FACW, FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL	x 1 =	
FACW	x 2 =	
FAC	x 3 =	
FACU **106**	x 4 =	**424**
UPL	x 5 =	
Sum: **106** (A)		**424** (B)

Prevalence Index = B/A = **4.00**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is > 50%

_____ Prevalence Index is <= 3.0

_____ Problematic Hydrophytic Vegetation[1] (explain)

_____ Rapid Test for Hydrophytic Vegetation

_____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

VHB

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WA-W100A

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WA-W100A**

Investigator(s): **PBW** Section, Township, Range: **Wallingford**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **concave** Slope (%): **0-3%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°27'6.614"N** Long: **72°52'25.918"W** Datum: **NAD 83**

Soil Map Unit: **Castile gravelly fine sandy loam** NWI Class: **PEM/PFO**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**YES**	Is This Sample Area Within a Wetland? **YES**
Hydric Soil Present?	**YES**	
Wetland Hydrology Present?	**YES**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? **X** Depth (inches): **Surface**

Saturation Present? **X** Depth (inches): **Surface**

Wetland Hydrology Present? **YES**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	**10YR 2/1**						**MUCKY LOAM**	
10-16+	**2.5Y 5/1**		**10YR 4/6**	**7**	**C**	**M**	**SANDY CLAY LOAM**	

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

Hydric Soil Indicators:

	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
	Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR R, MLRA 149B)
	Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)
	Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
	Stratified Layers (A5)		Depleted Matrix (F3)
X	Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)
	Thick Dark Surface (A12)		Depleted Dark Surface (F7)
	Sandy Mucky Mineral (S1)		Redox Depressions (F8)
	Sandy Gleyed Matrix (S4)		
	Sandy Redox (S5)		
	Stripped Matrix (S6)		
	Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **YES**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WA-W100A**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Betula alleghaniensis**	**15**	**X**	**FAC**
2. **Populus tremuloides**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Acer rubrum**	**15**	**X**	**FAC**
2. **Prunus pensylvanica**	**3**		**FACU**
3.			
4.			
5.			
6.			
7.			
	18	= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Alnus incana**	**15**	**X**	**FACW**
2. **Sambucus racemosa**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Myosotis scorpioides**	**38**	**X**	**OBL**
2. **Caltha palustris**	**15**	**X**	**OBL**
3. **Chrysosplenium americanum**	**15**	**X**	**OBL**
4. **Onoclea sensibilis**	**15**	**X**	**FACW**
5. **Impatiens capensis**	**3**		**FACW**
6. **Galium palustre**	**3**		**OBL**
7.			
8.			
9.			
10.			
11.			
12.			
	89	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **7** (A)

Dominants across all strata: **9** (B)

% Dominants OBL, FACW, FAC: **78%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply By:
OBL	**71**	x 1 =	**71**
FACW	**33**	x 2 =	**66**
FAC	**30**	x 3 =	**90**
FACU	**33**	x 4 =	**132**
UPL		x 5 =	
Sum:	**167** (A)		**359** (B)

Prevalence Index = B/A = **2.15**

Hydrophytic Vegetation Indicators:

- **X** Dominance Test is > 50%
- **X** Prevalence Index is <= 3.0
- ____ Problematic Hydrophytic Vegetation[1] (explain)
- ____ Rapid Test for Hydrophytic Vegetation
- ____ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **YES**

Remarks: (If observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

V-WA-W100B

Project Site: **NECPL** City/County: **Rutland** Samp. Date: **5/21/2014**

Applicant/Owner: **TDI** State: **Vermont** Sampling Point: **V-WA-W100B**

Investigator(s): **PBW** Section, Township, Range: **Wallingford**

Landform (hillslope, terrace, etc.): **terrace** Local relief (concave, convex, none): **convex** Slope (%): **0-3%**

Subregion (LRR or MLRA): **LRR R** Lat: **43°27'6.715"N** Long: **72°52'25.583"W** Datum: **NAD 83**

Soil Map Unit: **Castile gravelly fine sandy loam** NWI Class: **Upland**

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

Are Vegetation, Soil, or Hydrology significantly disturbed? **No** Normal Circumstances? **Yes**

Are Vegetation, Soil, or Hydrology naturally problematic? **No** (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	**NO**	Is This Sample Area Within a Wetland? **NO**
Hydric Soil Present?	**NO**	
Wetland Hydrology Present?	**NO**	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Surface Water (A1)	Water-Stained Leaves (B9)	
High Water Table (A2)	Aquatic Fauna (B13)	
Saturation (A3)	Marl Deposits (B13)	
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 (B7)	Other (Explain in Remarks)	
Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (minimum of two required)

Surface Soil Cracks (B6)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Depth (inches):

Water Table Present? Depth (inches):

Saturation Present? Depth (inches):

Wetland Hydrology Present? **NO**

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

Rainfall for the month of April was 2.36"(departure from normal value is not available) ; 0.59" in the 5 days prior in Rutland, VT (NWS 2014)

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 3/3**						**SILT LOAM**	
8-14	**2.5YR 5/3**						**SILT LOAM**	

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

Hydric Soil Indicators:

Histosol (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR K, L)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Stratified Layers (A5)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	
Sandy Gleyed Matrix (S4)		
Sandy Redox (S5)		
Stripped Matrix (S6)		
Dark Surface (S7) (LRR R, MLRA 149B)		

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

Indicators for Problematic Hydric Soils[3]:

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? **NO**

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: **V-WA-W100B**

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dom. Sp?	Indicator Status
1. **Acer saccharum**	**38**	**X**	**FACU**
2. **Fraxinus americana**	**15**	**X**	**FACU**
3.			
4.			
5.			
6.			
7.			
	53	= Total Cover	
Sapling Stratum (Plot size: **30' RADIUS**)			
1. **Prunus pensylvanica**	**38**	**X**	**FACU**
2. **Acer saccharum**	**15**	**X**	**FACU**
3. **Abies balsamea**	**15**	**X**	**FAC**
4.			
5.			
6.			
7.			
	68	= Total Cover	
Shrub Stratum (Plot size: **15' RADIUS**)			
1. **Sambucus racemosa**	**3**	**X**	**FACU**
2. **Cornus racemosa**	**3**	**X**	**FAC**
3.			
4.			
5.			
6.			
7.			
	6	= Total Cover	
Herb Stratum (Plot size: **5' RADIUS**)			
1. **Maianthemum canadense**	**3**	**X**	**FACU**
2. **Potentilla argentea**	**3**	**X**	**FACU**
3. **Fragaria virginiana**	**3**	**X**	**FACU**
4. **Osmunda cinnamomea**	**3**	**X**	**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	12	= Total Cover	
Woody Vines (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: **3** (A)

Dominants across all strata: **11** (B)

% Dominants OBL, FACW, FAC: **27%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:
OBL		x 1 =
FACW	**3**	x 2 = **6**
FAC	**18**	x 3 = **54**
FACU	**118**	x 4 = **472**
UPL		x 5 =
Sum:	**139** (A)	**532** (B)

Prevalence Index = B/A = **3.83**

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is > 50%
- ___ Prevalence Index is <= 3.0
- ___ Problematic Hydrophytic Vegetation[1] (explain)
- ___ Rapid Test for Hydrophytic Vegetation
- ___ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **NO**

Remarks: (If observed, list morphological adaptations below).

Unknown goldenrod (Solidago sp.) at 15%; Unknown aster (Symphyotrichum sp.) at 15%

T W55A

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: MVP CPL City/County: Mount Holly Sampling Date: 6/5/14

Applicant/Owner: TDI State: VT Sampling Point: T-MH-W55A

Investigator(s): JG, SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Valley / Flat Terrace Local relief (concave, convex, none): Concave Slope (%): _____

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: 71A NWI classification: PEM

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

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

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

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

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

Remarks: (Explain alternative procedures here or in a separate report.)

Class II larger wetland complex dominate with Phrag. outside ROW.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No _____	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 12"
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

t-mh-WSS

VEGETATION – Use scientific names of plants. Sampling Point: A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Spiraea latifolia	10	X	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Typha latifolia	20	X	OBL
2. Spike rush (Eleocharis palustris)	20	X	OBL
3. Onoclea sensibilis	50	X	FACW
4. Prickly lettuce (Lactuca serriola)	5		FAC
5. Swamp dock (Rumex verticillatus)	5		OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No _____

Remarks: (Include photo numbers here or on a separate sheet.)

There are no trees located in wetland. Upland trees have been excluded to best represent wetland

SOIL

Sampling Point: d-mh-WSSA

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 2.5/1	90	7.5YR 5/6	10	C	M	SaLo	
12+	5Y 4/1	95	5Y 6/1	5	D	M	SaLo	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: NONE

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly Sampling Date: 6/5/14

Applicant/Owner: TDI State: VT Sampling Point: T-mh-WSSB

Investigator(s): JG, SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Road Shoulder Local relief (concave, convex, none): Convex Slope (%): 5-10%

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: 71A NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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 /	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No /	
Wetland Hydrology Present?	Yes _____	No /	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No _____	Depth (inches): /	
Water Table Present?	Yes _____	No _____	Depth (inches): /	
Saturation Present? (includes capillary fringe)	Yes _____	No _____	Depth (inches): /	**Wetland Hydrology Present?** Yes _____ No /

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrogdy in Rd. Shoulder

VEGETATION – Use scientific names of plants.

Sampling Point: t-mh-w55B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Malus sp	10	X	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Prunus (choke) virginiana	30	X	FACU
2. Populus tremuloides	5		FAC
3. Spirea latifolia	2		FACW
4.			
5.			
6.			
7.			
	37 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Solidago canadensis	10		FACU
2. Sweet Vernal Grass (Anthoxanthum odoratum)			FACU
3. Cr. Red Fescue (Festuca rubra)	15	X	FACU
4. Solidago gigantia	15	X	FACW
5. Orchard grass (Dactylis glomerata)	10		FACU
6. Yarrow (Achillea millefolium)	10		FACU
7. Marsh fern (Thelypteris palustris)	5		FACW
8. Equisetum arvense	5		FAC
9.			
10.			
11.			
12.			
	80 = Total Cover		

Woody Vine Stratum (Plot size: —)			
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: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: t-mh-WSSB

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/2	100	—				SaLo	
2-15+	2.5Y 5/4	100	—				LoSa	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Plot taken in road shoulder. Road fill.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly Sampling Date: 6/4/14

Applicant/Owner: TDI State: VT Sampling Point: T-MH-50A

Investigator(s): JG, SC Section, Township, Range:

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: 4D 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? NO Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: T-MH-50A

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 2"
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO culvert to drain wetland. Hydrology drains via ditch towards stream located west.

T-MH-50A

VEGETATION – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Scirpus Microcarpus	25	X	OBL
2. Onoclea sensibilis	35	X	FACW
3. Spik rush (Eleocharis tenuis)	25	X	FACW
4. Nightshade (Solanum sp.)	10		
5.			
6.			
7.			
8.			
9.			
10.			
11. Eleocharis tenuis			
12.			
	95 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0 = 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 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

Ruts located in wetland plot. likely Car went off Road.

T-MH-50

SOIL Sampling Point: A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	—	—	—	—		SL	mucky
8-16+	10Y 6/1	85	2.5YR 5/4	15%			FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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)
- X Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None Observed

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly. Sampling Date: 6/4/14

Applicant/Owner: TDI State: UT Sampling Point: T-MH-50B

Investigator(s): JG, SC Section, Township, Range:

Landform (hillslope, terrace, etc.): hillside Local relief (concave, convex, none): convex Slope (%): 5%

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: 4D 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? NO Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (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 X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

upland plot on road shoulder

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches):

Water Table Present? Yes ____ No X Depth (inches):

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches):

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-MH-50

VEGETATION – Use scientific names of plants. Sampling Point: B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Creeping red fescue (Festuca rubra)	88	X	UPL
2. Marsh Fern (Thelypteris palustris)	10		
3. Equisetum arvense	2		
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-MH-50 B

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"+	10YR 2/2	100	—	—	—	—	—	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None Observed

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly Sampling Date: 6/3/14

Applicant/Owner: TDI State: VT Sampling Point: MH-WH4/1A

Investigator(s): JG, SC Section, Township, Range:

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: 12B NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

plot taken adjacent to road side ditch in PEM WETLAND

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches):
Water Table Present?	Yes X	No ____	Depth (inches): 12"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

MH-41-A

VEGETATION – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Abies balsamea	5%	X	FAC
2. Ulmus americana	2%	X	FACW
3.			
4.			
5.			
6.			
7.			
	7 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Rubus ideaus	5	x	FAC
2. Spiraea latifolia	5	x	FACW
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Equisetum arvense	25	x	FAC
2. Juncus effusus	50	x	FACW
3. Typha latifolia	10		
4. Onoclea sensibilis	5		FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1. NONE			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

10% open mud from ditch.

MH-41-A

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6-8	10YR 2/1	—	—	—	—	—	SL	Mucky
8-12	10YR 5/3		7.5YR 4/4	10%	M	C	SL	
12+	10Y 6/1		10YR 4/4	5%	M	PL	LS	
			7.5YR 4/4	10%	M	C		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly Sampling Date: 6/3/14

Applicant/Owner: TDI State: _____ Sampling Point: MH-41B

Investigator(s): JG, SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Flat roadside Local relief (concave, convex, none): Concave Slope (%): 3-5%

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: 122B NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Plot located in Road shoulder.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches):
Water Table Present?	Yes _____	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches):

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology along Fill Rd. Shoulder.

MH-418

VEGETATION – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Abies balsamea	5%	X	FAC
2. Ulmus americana	1%		FACW
3.			
4.			
5.			
6.			
7.			
	6	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Salix spp.	5	X	FACW
2. Larix laricina	2		FACW
3. Spiraea latifolia	15	X	FACW
4.			
5.			
6.			
7.			
	22	= Total Cover	

Herb Stratum (Plot size: 5')			
1. White wood Aster (Eurybia divaricata)	5		UPL
2. Aster umb (Doellingeria umbellata)	5		FACW
3. Creeping Red Fescue (Festuca rubra)	45	X	FACU
4. Tufted Vetch (Vicia cracca)	5		UPL
5. Yarrow (Achillea millefolium)	25	X	FACU
6. Canada Goldenrod	5		FACW
7. Madder (Galium mollugo)	5		FACU
8. Marsh Fern (Thelypteris palustris)	2		FACW
9. Solidago canadensis	5		FACU
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: _____)			
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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

herb layer would create upland plant dominance if Prevalence Index method is used.

MH-41-

SOIL Sampling Point: B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR3/3	—	—				SL	
6-16+	2.5Y 5/4	85	10YR 4/6	15%			SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: NONE

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

Road Fill + Natural Soils

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mt Holly Sampling Date: 5/30/2014

Applicant/Owner: TD/VTrans State: VT Sampling Point: T-MH-W28A

Investigator(s): TD/SC Section, Township, Range:

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR or MLRA): LRR R Lat: 43°26'54.26"N Long: 72°49'11.47" W Datum: NAD1983

Soil Map Unit Name: Peacham muck, 0 to 8 percent slopes 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? No Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: T-MH-W28A

Remarks: (Explain alternative procedures here or in a separate report.)

W28 is mapped as a class two wetland, majority is located in a field that appears to be previously mowed. Several upland islands are present that may be associated with agricultural ditching.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X 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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 1"
Water Table Present?	Yes X	No ____	Depth (inches): 0"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: TMH-28A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Salix nigra	5%	Yes	OBL
2. Sp. alba	5%	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Equisetum arvense	50%	Yes	FAC
2. Carex lupulina	15%	No	OBL
3. Carex palustris	15%	No	OBL
4. Solidago stricta	15%	No	OBL
5. Impatiens sp.	5%	No	FACW
6. Juncus effusus	5%	No	OBL
7. Iris pseudacorus	5%	No	OBL
8. Rough grass	5%	No	
9.			
10.			
11.			
12.			
	115 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: J-MH-W28A

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR2/1	100	—				muck	
12-18+	10YR3/1	95	10YR4/6	5	C	M	VFSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: —

Depth (inches): —

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly Sampling Date: 5/30/14

Applicant/Owner: TDI/VTrans State: VT Sampling Point: T-MH-W28B

Investigator(s): TW/SC Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%): 50

Subregion (LRR or MLRA): LRR R Lat: 43°26'54.19" N Long: 72°49'11.56" W Datum: NAD 1983

Soil Map Unit Name: Peacham muck, 0 to 8 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	If yes, optional Wetland Site ID: adj. to T-MH-W28A

Remarks: (Explain alternative procedures here or in a separate report.)

Grassy sloped bank. Narrow strip between wetland 28 and Route 103.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): —
Water Table Present?	Yes ____	No ✓	Depth (inches): —
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): —

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: J-mh-W2B

Tree Stratum (Plot size: —)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: —)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5)			
1. Carex sp.	T	NO	—
2. Juncus tenuis	90	yes	FAC
3. Securigera varia	T	NO	NL
4. Solidago canadensis	2	NO	FACU
5. Equisetum arvense	T	NO	FAC
6. Plantago major	2	NO	FACW
7. Spirea alba	T	NO	FACW
8.			
9.			
10.			
11.			
12.			
	98 = Total Cover		
Woody Vine Stratum (Plot size: —)			
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% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: 1-mh-wd88

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/2	100	—				FSaLo	Some gravel
6-7	2.5Y 3/2	100	—				FSaLo	Some gravel
7+	Restrictive							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Stony refusal

Depth (inches): 7"

Hydric Soil Present? Yes ____ No ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mt. Holly Sampling Date: 5/29/2014

Applicant/Owner: TDI/Vtrans State: VT Sampling Point: T-MH-W20A

Investigator(s): BWSC Section, Township, Range:

Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0-2%

Subregion (LRR or MLRA): LRR R Lat: 43°27'21.89" N Long: 72°47'50.39" Datum: NAD 1983

Soil Map Unit Name: Walpole fine sandy loam, 0 to 5 percent slopes 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? No Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: T-MH-W20A
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X 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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: TMH-204

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Larix laricina	5	Yes	FACW
2. Acer rubrum	10	yes	FAC
3. Salix nigra	5	Yes	OBL
4.			
5.			
6.			
7.			
	20	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Salix nigra	25	yes	OBL
2. Populus balsamifera	10	No	FACW
3. Spirea alba	20	yes	FACW
4.			
5.			
6.			
7.			
	55	= Total Cover	

Herb Stratum (Plot size: 5)			
1. Onoclea sensibilis	5	NO	FACW
2. Eleocharis rosellata	10	No	OBL
3. Plantago major	10	No	FACW
4. Trifolium repens	10	NO	FACU
5. Caltha palustris	10	NO	OBL
6. Scirpus atrovirens	20	yes	OBL
7. Rubus hispidus	15	NO	FACW
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1. —			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: 1-mh-20A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	85	7.5YR 4/6	15	C/PL	M	FSaLo	
8-12	10YR 4/1	75	10YR 4/6	5	C	M	FSaLo	
			10YR 5/6	10	C	M		
			10YR 5/4	10	D	M		
12+	Restrictive							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Stony refusal

Depth (inches): 12"

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: aerial City/County: Mt. Holly Sampling Date: 5/29/04

Applicant/Owner: TDI/Vtrans State: VT Sampling Point: T-MH-W20B

Investigator(s): M.J.L.S.C. Section, Township, Range:

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): convex Slope (%): 3%

Subregion (LRR or MLRA): LRR R Lat: 43°27'22.16"N Long: 72°47'50.67"W Datum: NAD83

Soil Map Unit Name: Adams loamy fine sand, 8 to 15 percent slopes NWI classification: —

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? No Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (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 X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: adj. to T-MH-W20A

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): —
Water Table Present?	Yes ____	No ✓	Depth (inches): —
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): —

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: T-MH-W20B

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. —			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. —			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30)			
1. Daucus carota	25	Yes	FACU
2. Trifolium repens	20	Yes	FACU
3. Taraxacum officinale	10	No	FACU
4. Securigera varia	10	No	NL
5. Fragaria virginiana	5	No	FACU
6. Solidago nigra	10	No	FAC
7. Phalaris arundinacea	10	No	FACW
8. Achillea millefolium	5	No	FACU
9.			
10.			
11.			
12.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. —			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	10	x 3 =	30
FACU species	65	x 4 =	260
UPL species	10	x 5 =	50
Column Totals:	95 (A)		360 (B)

Prevalence Index = B/A = 3.79

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: T-MH-WDB

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					SiCL	
4-8	10YR 4/3	100					"	
8-14	10YR 4/3	95	7.5YR 4/6	5	C	M	FSL	
14+	stony refusal							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NFCA City/County: Mt. Holly Sampling Date: 5/28/2014

Applicant/Owner: TOI Inmans State: VT Sampling Point: I-MH-W8A

Investigator(s): SWSC Section, Township, Range:

Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0%

Subregion (LRR or MLRA): LRR R Lat: 43°26'35.65" N Long: 72° 40'08.16" W Datum: NAD1983

Soil Map Unit Name: Marlow fine sandy loam, 8 to 15% slopes NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes Y No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: I-MH-W8A
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X 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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): —
Water Table Present?	Yes X	No ____	Depth (inches): 1"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: T MH-8A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. —			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Salix nigra	50	yes	OBL
2. Spi alba	25	yes	FACW
3. Acer rubrum	5	No	FAC
4. Dasiphora fruticosa	5	No	FACW
5.			
6.			
7.			
	85 = Total Cover		

Herb Stratum (Plot size: 5)			
1. N. sensibilis	15	yes	FACW
2. E. palustris	5	No	FAC
3. Scirpus atrovirens	25	yes	OBL
4. Thelypteris palustris	5	No	FACW
5. J. effusus	10	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60 = Total Cover		

Woody Vine Stratum (Plot size: 30)			
1. —			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: Trk-WBA

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100	—				Mucky Silt	
6-18+	10YR 4/1	90	10YR 6/8	5	C	M	Silt	
			10YR 6/6	5	C	M	Silt	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: —

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mt. Holly Sampling Date: 5/28/2014

Applicant/Owner: Williams State: VT Sampling Point: T-MH-8E

Investigator(s): SWISS Section, Township, Range:

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 10%

Subregion (LRR or MLRA): LRR R Lat: 43°26'35.81"N Long: 72°46'08.01"W Datum: NAD1983

Soil Map Unit Name: Marlow-Rawsonville complex, 8 to 15 percent slopes NWI classification: —

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? NO Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (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 X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: adj to T-MH-8A

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: T-MH-SB

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. —			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Fagus grandifolia	5	yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	5 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Spiraea alba	T	No	FACW
2. Daucus Carota	15	yes	UPL
3. Secuigera varia	15	yes	NL
4. Acer rubrum	T	No	FAC
5. Prunus Serotina	T	No	FACU
6. Galium triflorum	15	yes	FACU
7. Solidago nigra	10	No	FAC
8. Achillea millefolium	15	yes	FACU
9. Plantago major	5	No	FACW
10. Onoclea Sensibilis	T	No	FACW
11.			
12.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1. —			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	40	x 4 =	160
UPL species	30	x 5 =	150
Column Totals:	80 (A)		340 (B)

Prevalence Index = B/A = 4.25

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: [illegible]

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100	—				SaLo	
8-15	10YR 4/3	100	—				SaLo	
15+	Restrictive							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L)**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: Stony Refusal
Depth (inches): 15+

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly Sampling Date: 5/27/14

Applicant/Owner: TDI/VTrans State: VT Sampling Point: T-MH-W4A

Investigator(s): JW, SC Section, Township, Range:

Landform (hillslope, terrace, etc.): alluvial Local relief (concave, convex, none): slightly concave Slope (%): 0-10%

Subregion (LRR or MLRA): LRR R Lat: 43°26' 15.00" N Long: 72°45'12.41" Datum: NAD1983

Soil Map Unit Name: Undifferentiated and Fluvaquents, nearly level NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: T-MH-W4A

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ✓	No ____	Depth (inches): 12"
Saturation Present? (includes capillary fringe)	Yes ✓	No ____	Depth (inches): 1"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-MH-W4 represents wetland fringe adjacent to Branch Brk (T-MH-S10).

VEGETATION – Use scientific names of plants.

Sampling Point: 1-mh-W4A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. —			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Salix nigra	25	yes	OBL
2. Spiraea alba	25	yes	FACW
3. Salix fragilis	40	yes	FAC
4.			
5.			
6.			
7.			
	90 = Total Cover		

Herb Stratum (Plot size: 5)			
1. Onoclea sensibilis	10	yes	FACW
2. Galium aspellum	5	No	OBL
3. Solidago rugosa	15	yes	FAC
4. Equisetum arvense	5	No	FAC
5. Iris pseudacorus	5	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40 = Total Cover		

Woody Vine Stratum (Plot size: 30)			
1. —			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: Imh W4A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 4/2	100					SaLo	
1-15	10YR 2/2	95	7.5YR 4/6	5	C	M	SaLo	
15-18	2.5Y 3/2	100					GraSa	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: —

Depth (inches): —

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Mount Holly Sampling Date: 5/27/14

Applicant/Owner: TDI / VTrans State: VT Sampling Point: T-mh-W4B

Investigator(s): JW, SC Section, Township, Range: ____

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 10%

Subregion (LRR or MLRA): LRR R Lat: 43°26'15.03" N Long: 72°45'12.91" W Datum: NAD1983

Soil Map Unit Name: udipsamments and fluvaquents, nearly level NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ____	Is the Sampled Area within a Wetland? Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ____	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: adj to T-MH-4A

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): —
Water Table Present?	Yes ____	No X	Depth (inches): —
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): —

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 1-mh-W4B

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. —			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Salix nigra	15	yes	OBL
2. Fraxinus americana	5	no	FACW
3. Spirea alba	15	yes	FACW
4.			
5.			
6.			
7.			
	35 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Rubus allegheniensis	20	yes	FACU
2. Solidago nigra	5	no	FAC
3. Prunus virginiana	25	yes	FACU
4. Cirsium arvense	10	no	FACU
5. Solidum tuberosum	5	no	FACW
6. Equisetum arvense	5	no	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1. —			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	15	x 2 =	30
FAC species	10	x 3 =	30
FACU species	105	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	145 (A)		335 (B)

Prevalence Index = B/A = 3.19

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: tmh-WTB

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y 4/3	100					LoSa	
6+	Rocky Restriction							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rocky

Depth (inches): 6"

Hydric Soil Present? Yes ____ No ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow/Windsor Sampling Date: 5/22/14

Applicant/Owner: TDI State: VT Sampling Point: T-LU-W14 A

Investigator(s): JG SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): hillside Local relief (concave, convex, none): concave Slope (%): 0-3%

Subregion (LRR or MLRA): LRR Lat: Long: Datum:

Soil Map Unit Name: Soil 604B 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? NO Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	If yes, optional Wetland Site ID: T-LU-W14
Wetland Hydrology Present?	Yes X	No	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):	
Water Table Present?	Yes X	No	Depth (inches):	10"
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):	0"

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: T-LU-W14 A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. None			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2. None			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Impatiens capensis	70	X	FACW
2. Onoclea sensibilis	30	X	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-LU-W14 A

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	90	7.5YR 4/4	10	C	M	CSL	
4-6	10YR 4/1	100	—	—	—	—	SL	
6-16+	10YR 5/1	80	5YR 4/4	20	C	M	SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None Observed

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow / Windsor Sampling Date: 5/22/14

Applicant/Owner: TDI State: VT Sampling Point: T-LU-W14B

Investigator(s): JTS, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Convex/Slope Slope (%): 5%

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: Soil 64B 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? N Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? N (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 X	**Is the Sampled Area within a Wetland?** Yes	No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

Plot located on side slope

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No X	Depth (inches):

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-LV-W14

VEGETATION – Use scientific names of plants. Sampling Point: B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea (white) glauca	40	X	UPL
2. Populus tremuloides	5		
3. Acer rubrum	3		
4. Fraxinus americana	5		
5.			
6.			
7.			
	53	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Acer saccharum	5%	X	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	

Herb Stratum (Plot size: 5')			
1. X mas Fern. Polystichum acrostichoides	15	X	FACU
2. Prunus virginia.	5		
3. Dryopteris spp.	10	X	NI
4. Cornus Florida.	3		
5. Amalanchier bartramiana	1		
6. Acer saccharum.	1		
7. Wild Geranium (Geranium maculatum)	5		
8. onoclea sensibilis.	5		
9. Smilacina racemosa	1		
10.			
11.			
12.			
	46	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

T-LW-W14

SOIL

Sampling Point: B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	2.5Y 3/3	100%	—	—	—	—	SL	
4-12+	10YR 3/4	100%	—	—	—	—	SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___ None observed.

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow / Windsor Sampling Date: 5/22/13

Applicant/Owner: TRI State: VT Sampling Point: T-IV-W13A

Investigator(s): JG, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: Soil 64D NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? NO Are "Normal Circumstances" present? Yes ✓ No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No	**Is the Sampled Area within a Wetland?** Yes ✓ No
Hydric Soil Present?	Yes ✓ No	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ✓ No	

Remarks: (Explain alternative procedures here or in a separate report.)

Wetland W13 is a complex connected by culverts.

The PPT is taken on the western portion of the wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✓ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✓ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No ___	Depth (inches): 1"
Water Table Present?	Yes ✓	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

ground water / spring located in Bolder alley steep slope

T-LV-W13A

VEGETATION – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Salix discolor	15%	X	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Phalaris arundinacea	90	X	FACW
2. Onoclea sensibilis.	10		
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-LV-W13A

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
4-0	10YR 2/1						Muck	organic Saprric
0-10+	10Y 4/1	90	2.5Y 4/3	10%	C	M	SL	gley gravelly

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- X Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None observed.

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow Sampling Date: 5/22/13

Applicant/Owner: TDI State: VT Sampling Point: T-LV-W13B

Investigator(s): JG, SC Section, Township, Range:

Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Slope/convex Slope (%): 15%

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: Soil 64D 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? NO Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (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 X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

Upland plot taken on forested side slope

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ____	Depth (inches): ____
Water Table Present?	Yes ____	No ____	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ____	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NONE

T-LU-W13

VEGETATION – Use scientific names of plants. Sampling Point: B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer Saccharum	40	X	FACU
2. Fraxinus americana	10	X	FACU
3.			
4.			
5.			
6.			
7.			
	50	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Beaked hazelnut - Corylus cornuta	15	X	FACU
2. Mountain maple (Acer spicatum)	10	X	FACU
3. Prunus serotina	15	X	FACU
4.			
5.			
6.			
7.			
	40	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Trillium erectum	20	X	FACU
2. Dryopteris intermedia	15	X	UPL
3. Virgin's Bowers	10		
4. Jack in pulpit	2		
5. False Solomon Seal	5		
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	52	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-LV-W13

SOIL

Sampling Point: B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					FSL	
6-10	10YR 3/4	100					FSL	
R								Boulders

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Boulders

Depth (inches): 10"

Hydric Soil Present? Yes _____ No ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow / Windsor Sampling Date: 5/21/2014

Applicant/Owner: TDI State: VT Sampling Point: F-Lu-WHA

Investigator(s): JG SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): flat bottomland Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Soil Le & C NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

Plot near Stone wall adjacent to road PFO mixed with some PSS

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ✓ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 1"
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 7-10-WH-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus pennsylvanica	5	X	FACW
2. Acer rubrum	10	X	FAC
3. Ulmus americana	5	X	FACW
4. Betula alleghaniensis	2		
5.			
6.			
7.			
	22	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. Cornus amomum	30	X	FACW
2. Amelanchier alnifolia	1		
3. Ulmus americana	2		
4. Elder B.	5		
5.			
6.			
7.			
	28	= Total Cover	

Herb Stratum (Plot size: 5)			
1. Onoclea sensibilis	2		
2. Equisetum arvense	15	X	FAC
3. Elder B.	5		
4. Impatiens capensis	10	X	FACW
5. Viburnum dentatum	2		
6. Unknown herb	2		
7.			
8.			
9.			
10.			
11.			
12.			
	36	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2. None			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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: 7-10-WII-A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/1	90	5YR 3/4	10	C	M	SL	
8-16+	10YR 5/1	70	5YR 3/4	15	C	M	LFS	
			10YR 4/4	15	C	M		10YR 4/1 - Streaking - in horizon 10%

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: ___ None observed

Depth (inches): ___

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: ~~TDI~~ NECPI City/County: Ludlow/Windsor Sampling Date: 5/21/2014

Applicant/Owner: TDI State: VT Sampling Point: t-1u-WIIB

Investigator(s): JG, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): Flat Bottomland Local relief (concave, convex, none): convex Slope (%): 3

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Soil 68C NWI classification: —

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? NO Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: t-1-WIIB

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fagus grandifolia	5		
2. Ulnus americana	2		
3. Acer saccharinum	20	X	FACW
4. Betula allaghaniensis	10	X	FAC
5. Pinus Strobis	2		
6.			
7.			
	39	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. Ulnus americana	2		
2. Acer pennsyl... ?	2		
3. Amelanchier bartramiana	5	X	FAC
4. Fraxinus americana	5	X	FACW
5. Acer Saccharinum	2		
6.			
7.			
	16	= Total Cover	

Herb Stratum (Plot size: 5)			
1. Trillium erectum	5	X	FACU
2. False Sol. Seal Maianthemum racemosum	5	X	FACU
3. Jack in pulpit	1		
4. Prunus Serotina	2		
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	13	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: T-10-WL13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 2.5/1	100					SaLo	
6-12+	2.5Y 5/2	85	5YR 3/4	10	C	M	SaLo	
			10YR 4/4	5	C	M	SaLo	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None observed.

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow Sampling Date: 5/20/14

Applicant/Owner: _____ State: VT Sampling Point: T-LU-WQA

Investigator(s): JG, SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Bottom land Local relief (concave, convex, none): Concave Slope (%): 0-1%

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Soil 17B NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No _____ Hydric Soil Present? Yes X No _____ Wetland Hydrology Present? Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____ If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 15"

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-LV-WQ-A

VEGETATION – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	5	X	FAC
2. Malus spp.	3	X	NI
3.			
4.			
5.			
6.			
7.			
	8 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Betula populafolia	3		
2. Acer rubrum	2		
3. Malus. Spp	2		
4. amelanchier bartramiana	10	X	FAC
5. Salix nigra.	10	X	OBL
6. Prunus virginiana	1		
7. Spiraea latifolia.	5		
	33 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Turf mat	5		
2. Dandelion	2		
3. Osmunda claytonia.	15	X	FAC
4. onoclea sensibilis.	5		
5. Impatiens pendensis.	5		
6. Acer rubrum	3		
7.			
8.			
9.			
10.			
11.			
12.			
	35 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1. NONE			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-LV-W9

SOIL

Sampling Point: A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2		7.5YR 4/6	5%	C	P	SL	
8-16+	5YR 3/3						LCS	gravelly Iron rich Bhs horizon likely Mesic Concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None Observed

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow/Windsor Sampling Date: 5/20/14

Applicant/Owner: TDI State: VT Sampling Point: T-LU-WG-B

Investigator(s): JG, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): Small Valley Local relief (concave, convex, none): Convex Slope (%): 0

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: Soil 17 B 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? NO Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (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 X	**Is the Sampled Area within a Wetland?** Yes	No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)

Along rd and adjacent to stonewall.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No X	Depth (inches):

Wetland Hydrology Present? Yes No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-LU-W9

VEGETATION – Use scientific names of plants. Sampling Point: B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Festuca spp.	45	X	FACU
2. Aster spp.	15		
3. Onoclea Sensibilis.	2		
4. Lady Fern. (Athyrium filix-femina)	5		
5. Burdoc. (Rumex obtusifolia)	5		
6. Knotweed (Polygonum cuspidatum)	10		
7. Dandilions. (Taraxacum officinale)	5		
8. Cow Vetch (Vicia cracca)	1		
9. Equisetum arvense.	1		
10.			
11.			
12.			
	89 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

- Fescue located in uplands without hydric soil, of wetland hydrology. presumed FACU

- Aster assumed to be FACU/FACW

T-LU-9WB

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100	—	—	—	—	SL	plow layer
10-14+	10YR 3/2	100	—	—	—	—	SL	gravelly

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None observed.

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No Redox Deep Black Soil in Farm area Refusal @ Rocky horizon

T-LU-W6A

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow/Windsor Sampling Date: 5/20/14

Applicant/Owner: TDI State: VT Sampling Point: T-LU-W6A

Investigator(s): JG, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): hillside Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: Soil 17C 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? NO Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes X No ____	

Remarks: (Explain alternative procedures here or in a separate report.)

Side SEEP wetland. drains in ditch. Ruts located in wetland

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 8"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-LU-WL6 A

VEGETATION – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: N/A) 30'	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. None			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Spiraea latifolia	40	X	FAC
2. Pinus strobus.	5		
3. Prunus virginiana	1		
4.			
5.			
6.			
7.			
	46 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Carex crinita	30	X	OBL
2. Onoclea sensibilis.	5		
3. Osmunda cinnamomea	2		
4. Juncus effusus.	1		
5. Fragaria virginiana	1		
6. Aster spp.	1		
7. Field horst Equisetum arvense	1		
8. Impatiens capensis	5		
9. Jack Dalpet (Arisaema triphyllum)	1		
10. Northern willow herb.	1		
11. b/Epilobium ciliatum			
12.			
	48 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1. NONE			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

No tree located with wetland. Where hydric soils and wetland hydrology were present. Therefore NOT in decision to wetland.

T-LU-Wb A

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	100%					SL	Mucky
4-8	10YR 3/2	85	5YR 4/6	15%			SL	
8+	10YR 4/2	85	↓	↓			SL	gravelly

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____ None observed

Hydric Soil Present? Yes X No _____

Remarks:

T-LU-WG B

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow / Windsor Sampling Date: 5/20/14

Applicant/Owner: TDT State: VT Sampling Point: T-LU-WG B

Investigator(s): JG, SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15%

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Soil 17C 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? NO Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T- LV - W6

VEGETATION – Use scientific names of plants. Sampling Point: B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga Canadensis.	10	X	FACU
2. Fagus grandifolia.	5	X	
3. Betula Papyrifera	2		
4. Fraxinus americana	5	X	
5.			
6.			
7.			
	22	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Quercus rubra.	2		
2. Acer (Striped)	2		
3. Abies balsamia	1		
4. Prunus Virginiana	2		
5. Spiraea latifolia.	15	X	FAC
6. Rubus. alleghaniensis	2		
7. Fagus grandifolia	10	X	FACU
	34	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Aster spp.	3		
2. Solidago canadensis	2		
3. Onoclea Sensibilis	5	X	
4. Carex spp.	2		
5. Strawberry. Fragaria Virginiana	8	X	
6. Broad beech fern.	1		
7. Acer Saccharum	2		
8. Foam Flower. (Tiarella cordifolia)	1		
9. X-fern. (Polystichum acrostichoides)	1		
10.			
11.			
12. Phegopteris hexagonoptera			
	25	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-LV-W6

SOIL

Sampling Point: B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-10	7.5Y 3/2	100%	—	—	—	—	SL	
10-16+	2.5Y 4/4	100%	—	—	—	—	SL	gravel present Stoney below 16"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None Observed.

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECDL City/County: Ludlow, Windsor Sampling Date: 5/19/14

Applicant/Owner: TDI State: VT Sampling Point: T-LU-W3

Investigator(s): JG, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave. Slope (%): 5%

Subregion (LRR or MLRA): Lat: Long: Datum:

Soil Map Unit Name: Soil 54C 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? NO Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes X	No	

Remarks: (Explain alternative procedures here or in a separate report.)

Wetland drains Through Field in to Culvert and via Culvert into T-LU-S7 (PEM)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 2"
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-LU-W3 A

VEGETATION – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	10	X	FAC
2. Fraxinus Americana.	15	X	FACU
3. Pinus Strobus.	5		
4. Acer Saccharum	5		
5. Ulmus americana	5		
6.			
7.			
	40	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. NONE.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: 5.)			
1. Impatiens capensis	70	X	FACW
2. Onoclea sensibilis	15.		
3. Lysamachia nummularia (Creeping Jenny	5		
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-LU-W3-A

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100					FSL	
10-16+	2.5YR 4/2	80	7.5YR 4/4	10			FSL	
			2.5YR 4/1	10				

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- X Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None observed.

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow, Windsor Sampling Date: 5/19/14

Applicant/Owner: TDI State: VT Sampling Point: T-LU-W3-B Upland

Investigator(s): JG, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): convex Slope (%): 2%

Subregion (LRR or MLRA): — Lat: — Long: — Datum: —

Soil Map Unit Name: Soil 54 C NWI classification: —

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? NO Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (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 X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

Plot taking in upland ditch @ utility pole

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

T-LV-W3

VEGETATION – Use scientific names of plants. Sampling Point: B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer Saccharum	20	X	FACU
2. Pinus Strobus	2		
3.			
4.			
5.			
6.			
7.			
	22	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Prunus Serotina.	10	X	FACU
2. Fraxinus americana.	2		
3.			
4.			
5.			
6.			
7.			
	12	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Lysimachia nummularica	30	X	FACW
2. Ind. Fern. (Osmunda claytoniana)	10%		
3. Trout lily (Erythronium rostratum)	10%		
4. Field horsetail (Equisetum arvense)	10%		
5. Dandilion. (Taraxacum officinale)	5%		
6. Onclea sensibilis.	5%		
7. Garlic mustard (Alliaria petiolata)	20%	X	FACU
8. Hay Scented Fern	10%		
9. ↳ (Dennstaedtia punctilobula)			
10.			
11.			
12.			
	100	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2. None			
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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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.)

T-LV-W3- B.

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/2	100					FSL	Sandy from road runoff
12-14+	2.5Y 4/2	60%	7.5YR 4/4	20%			FSL	↓

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None observed

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Disturbed soils located in ditch. Hydric soil only located @ Bottom of ditch. No wetland feeding into this portion of Ditch.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow / Windsor Sampling Date: 5/19/14

Applicant/Owner: TDI State: VT Sampling Point: T-LU-W2-A

Investigator(s): JB, SC Section, Township, Range: _____

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Soil 31B NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	If yes, optional Wetland Site ID: T-LU-W2

Remarks: (Explain alternative procedures here or in a separate report.)

Wetland Seeps feeding into ditch
Ditch is a stream on east side of road

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✓ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 1"
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0"

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Groundwater seep from the west

VEGETATION – Use scientific names of plants.

Sampling Point: T-CO-WZ-A

Tree Stratum (Plot size: —)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. None			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Fagus grandifolia	2	X	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	2 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Prunus Serotina	1		
2. Trout l. (Erythronium americanum)	20	X	FAC
3. Impatiens capensis	20	X	FACW
4. Onoclea sensibilis	25	X	FACW
5. Glyceria striata	10		
6. phalaris arundecea	5		
7. Osmunda Claytoniana	10		
8.			
9.			
10.			
11.			
12.			
	91 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2. None			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

No trees included in plot - no trees along road shoulder

SOIL

Sampling Point: HU-W2-A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 2/2	100					FSL	
14-20	10YR 2/1	100					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None Observed.

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NECPL City/County: Ludlow / Windsor Sampling Date: 5/19/14

Applicant/Owner: TDI State: VT Sampling Point: T-1u-w2B

Investigator(s): JG, SC Section, Township, Range: —

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 5%

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Soil 31B NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 1-1-wet-B

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus americana	5	x	FACW
2. Acer Saccharum	7	x	FACU
3.			
4.			
5.			
6.			
7.			
	12 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1. Prunus Serotina	2	X	FACU
2. fraxinus americana	2	X	FACW
3. Rubus idaeus	5	X	FACU
4.			
5.			
6.			
7.			
	9 = Total Cover		

Herb Stratum (Plot size: 5)			
1. Osmunda Claytoniana	40	X	FAC
2. Impatiens Capensis	10		FACW
3. Trout L. (Erythronium americanum)	15		FAC
4. Christmas fern (Polystichum acrostichoides)	30	X	FACU
5. Alliaria petiola	1		
6. Dennstaedtia punctilobula	15		
7.			
8.			
9.			
10.			
11.			
12.			
	111 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1. None			
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: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 16 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: T-10-W2-B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/2	100	—	—	—	—	FSaL	
10-14+	10YR 4/3	100	—	—	—	—	FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ None observed.

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks: