#### APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

## SECTION I: BACKGROUND INFORMATION

**REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 19 March 2010** A.

DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, VT Agency of Transportation/NYS Department of B. Transportation; NAE-2009-2622

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Vermont County/parish/borough: Addison City: Addison Center coordinates of site (lat/long in degree decimal format): Lat. 44.0342341° N, Long. 73.4217916° W. Universal Transverse Mercator: 18

Name of nearest waterbody: Lake Champlain

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Champlain Name of watershed or Hydrologic Unit Code (HUC): 02010006

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

### D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- $\boxtimes$ Office (Desk) Determination. Date: October 21,2009
- Field Determination. Date(s): October 21, 2009

### SECTION II: SUMMARY OF FINDINGS

# A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
- Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: Lake Champlain flows into Canada and is an international and interstate water.

# **B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

- 1. Waters of the U.S.
  - a. Indicate presence of waters of U.S. in review area (check all that apply): <sup>1</sup>
    - TNWs, including territorial seas
    - Wetlands adjacent to TNWs
    - Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
    - Non-RPWs that flow directly or indirectly into TNWs
      - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      - Impoundments of jurisdictional waters
      - Isolated (interstate or intrastate) waters, including isolated wetlands
  - b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 1000 linear feet: width (ft) and/or acres. Wetlands: 0.10 acres.
  - c. Limits (boundaries) of jurisdiction based on: Established by OHWM. Elevation of established OHWM (if known):98.0', NGVD.

# 2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

#### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

#### 1. TNW

Identify TNW: Lake Champlain.

Summarize rationale supporting determination: Lake Champlain is an interstate and international waterway and has been determined navigable based on present and future use to transport interstate and foreign commerce.

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Wetland abuts OHW of Lake Champlain.

#### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

# 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

 (i) General Area Conditions: Watershed size: Pick List Drainage area: Pick List Average annual rainfall: inches Average annual snowfall: inches

### (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>
 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Project water

Identify flow route to TNW<sup>5</sup>:

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

		Tributary stream order, if known:
	(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Characteristic (man-made)         Image: Characteristic (man-made)       Explain: Image: Characteristic (man-made)
		Tributary properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes: Pick List.
		Primary tributary substrate composition (check all that apply):
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: <b>Pick List</b> Tributary gradient (approximate average slope):%
	(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime:
		Surface flow is: <b>Pick List.</b> Characteristics:
		Subsurface flow: <b>Pick List</b> . Explain findings: Dye (or other) test performed:
		Tributary has (check all that apply):         Bed and banks         OHWM <sup>6</sup> (check all indicators that apply):         clear, natural line impressed on the bank         changes in the character of soil         shelving         vegetation matted down, bent, or absent         leaf litter disturbed or washed away         sediment deposition         water staining         other (list):         Discontinuous OHWM. <sup>7</sup> Explain:
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): <ul> <li>High Tide Line indicated by:</li> <li>Oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii)	Che Cha Iden	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: tify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

#### (iv) Biological Characteristics. Channel supports (check all that apply):

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

#### 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain:
  - Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain:

> Surface flow is: Pick List Characteristics:

Subsurface flow: **Pick List**. Explain findings: \_\_\_\_\_.

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

#### (d) Proximity (Relationship) to TNW

Project wetlands are Pick List river miles from TNW.
Project waters are Pick List aerial (straight) miles from TNW.
Flow is from: Pick List.
Estimate approximate location of wetland as within the Pick List floodplain.

## (ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

#### (iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

# 3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis.

#### For each wetland, specify the following:



#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

# Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

# Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

# **D.** DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

- 2. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
  - Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

acres.

- Tributary waters: linear feet width (ft).
- Other non-wetland waters:
  - Identify type(s) of waters:
- 3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.
  - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters:
  - Identify type(s) of waters:
- 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
  - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
    - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
    - Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area:

- 5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
  - Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: \_\_\_\_\_acres.

# 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area:

- 7. Impoundments of jurisdictional waters.<sup>9</sup>
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
    - Demonstrate that impoundment was created from "waters of the U.S.," or
    - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
  - Demonstrate that water is isolated with a nexus to commerce (see E below).
- E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>
  - which are or could be used by interstate or foreign travelers for recreational or other purposes.
  - from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
  - which are or could be used for industrial purposes by industries in interstate commerce.
  - Interstate isolated waters. Explain:
  - Other factors. Explain:

Identify water body and summarize rationale supporting determination:

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>&</sup>lt;sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos*.

	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
F.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>Prior to the Jan 2001 Supreme Court decision in <i>"SWANCC</i>," the review area would have been regulated based <u>solely</u> on the <i>"Migratory Bird Rule"</i> (MBR).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):           Non-wetland waters (i.e., rivers, streams):         linear feet         width (ft).           Lakes/ponds:         acres.           Other non-wetland waters:         acres. List type of aquatic resource:         .           Wetlands:         acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

Non-wettan	iu wai	EIS (I.C., II	ivers, a	sucams).		initial leet,	wiu	ան
Lakes/pond	ls:	acres.						
Other non-v	wetlan	d waters:		acres. Li	ist typ	e of aquatic re	esource:	
Wetlands:	ä	acres.						

# SECTION IV: DATA SOURCES.

A.	A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where	checked
	and requested, appropriately reference sources below):	
	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Scaled plans of proposed project.	

$\bowtie$	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Scaled plans of proposed
$\bowtie$	Data sheets prepared/submitted by or on behalf of the applicant/consultant.
	Office concurs with data sheets/delineation report.
	Office does not concur with data sheets/delineation report.
	Data sheets prepared by the Corps:
$\bowtie$	Corps navigable waters' study: 1976.
$\bowtie$	U.S. Geological Survey Hydrologic Atlas:
	USGS NHD data.
	USGS 8 and 12 digit HUC maps.
$\bowtie$	U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000; Port Henry, NY-VT.
	USDA Natural Resources Conservation Service Soil Survey. Citation:
	National wetlands inventory map(s). Cite name:
	State/Local wetland inventory map(s):
	FEMA/FIRM maps:
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	Photographs: Acrial (Name & Date):
	or 🗌 Other (Name & Date):
	Previous determination(s). File no. and date of response letter:
	Applicable/supporting case law:
	Applicable/supporting scientific literature:
	Other information (please specify):

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: Project will involve the replacement of the Crown Point Bridge across Lake Champlain between Addison, VT and Crown Point, NY. Lake Champlain is both an interstate and an international water body.

### APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

### SECTION I: BACKGROUND INFORMATION

**REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14 June 2010** A.

#### DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District; Staniford Farms LLC; NAE-2006-4208 В.

#### C. **PROJECT LOCATION AND BACKGROUND INFORMATION:**

County/parish/borough: Chittenden City: Burlington State:VT

Center coordinates of site (lat/long in degree decimal format): Lat. 44.5065668° N, Long. 73.2628457° W.

Universal Transverse Mercator: 18

Name of nearest waterbody: Unnamed tributary of Lake Champlain

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Champlain

Name of watershed or Hydrologic Unit Code (HUC): 02010001

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.  $\boxtimes$ 

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

### D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: 14 June 2010  $\square$ 

Field Determination. Date(s): 5 May 2008

# **SECTION II: SUMMARY OF FINDINGS**

# A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

Waters subject to the ebb and flow of the tide. 

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

# **B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

### 1. Waters of the U.S.

- a. Indicate presence of waters of U.S. in review area (check all that apply): <sup>1</sup>
  - TNWs, including territorial seas
  - Wetlands adjacent to TNWs
  - Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
  - Non-RPWs that flow directly or indirectly into TNWs
    - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
    - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
    - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
    - Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

#### b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: Three existing ponds 0.81 acres & unnamed stream 250 linear feet: 3 width (ft) and/or 0.02 acres. Wetlands: 2.7 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known): .

#### Non-regulated waters/wetlands (check if applicable):<sup>3</sup> 2.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

#### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination: .

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": .

## B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

## 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

 (i) General Area Conditions: Watershed size: 0.18 square miles Drainage area: 0.18 square miles Average annual rainfall: 31.6 inches Average annual snowfall: 67 inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>
 ☑ Tributary flows directly into TNW.
 ☑ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are 1 (or less) river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 1 (or less) aerial (straight) miles from TNW.
Project waters are 1 (or less) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: No.

Identify flow route to TNW<sup>5</sup>: Unnamed tributary that flows beneath Appletree Point Road about 500' into Lake Champlain, a Section 10 waterway.

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: 1.

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       ☑ Natural         ☑ Artificial (man-made).       Explain: Ditch constructed along recreational trail.         ☑ Manipulated (man-altered).       Explain: Ponds on the site were constructed in the wetlands.
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 1 feet Average side slopes: 2:1.
	Primary tributary substrate composition (check all that apply):       Concrete         Silts       Sands       Concrete         Cobbles       Gravel       Muck         Bedrock       Vegetation. Type/% cover:       Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Gentle sloping banks, little to no erosion. Presence of run/riffle/pool complexes. Explain: none. Tributary geometry: <b>Relatively straight</b> Tributary gradient (approximate average slope): 3 %
(c)	<u>Flow:</u> Tributary provides for: <b>Seasonal flow</b> Estimate average number of flow events in review area/year: <b>11-20</b> Describe flow regime: Based on numerous site visits the stream has continuous flow for more than three months. Other information on duration and volume:
and upland for	Surface flow is: <b>Confined.</b> Characteristics: Adjacent land is a mix of landscaped lawns, scrub-shrub/forested wetland rest and open field.
	Subsurface flow: Unknown. Explain findings: Dye (or other) test performed: .
	Tributary has (check all that apply): Bed and banks OHWM <sup>6</sup> (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. <sup>7</sup> Explain: If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
	<ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>

### (iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Water is clear; water qulity is assumed to be good; water shed is developed by closely spaced residential homes. Identify specific pollutants, if known: Salt and sand spread on adjacent roads during winter months and fertilizers spread on lawns during summer months.

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

#### (iv) Biological Characteristics. Channel supports (check all that apply):

- Riparian corridor. Characteristics (type, average width): scrub-shrub and forested, 50' -100'.
- Wetland fringe. Characteristics: wet meadow, scrub-shrub/forested.
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: Water source for small mammals and various insects, invertebrates and

amphibians.

#### 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

#### (i) Physical Characteristics:

- (a) General Wetland Characteristics:
  - Properties:
    - Wetland size: 2.7 acres
    - Wetland type. Explain: Wet meadow and Scrub-shrub/forested.

Wetland quality. Explain: Appears good, adjacent water shed is developed by residential homes and recreatioanl

path.

Project wetlands cross or serve as state boundaries. Explain: No.

(b) General Flow Relationship with Non-TNW:

Flow is: **No Flow**. Explain: The stream the wetlands drain to flows at a minimum from late winter into the summer months, more than three months of continuous flow. The wetlands on the parcel have no flow.

Surface flow is: Not present

Characteristics: Open, forested and scrub-shrub.

Subsurface flow: **Unknown**. Explain findings: Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting

Discrete wetland hydrologic connection. Explain:

 $\overline{X}$  Ecological connection. Explain: Small neighboring wetlands to existing ponds, within 350' of surface water. It is likely that wetland dependent wildlife, primarily amphibians and small mammals, travel between the wetlands and the stream/ponds.

- Separated by berm/barrier. Explain:
- (d) Proximity (Relationship) to TNW

Project wetlands are 1 (or less) river miles from TNW. Project waters are 1 (or less) aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 2 - 5-year floodplain.

#### (ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Surrounding area is developed by closely spaced residential homes, roadways and recreational path. The wetlands may receive some pollutants in the form of road salt and fertilizer.

Identify specific pollutants, if known: Sand and salt runoff from roadways and fertilizers spread on lawns during summer

months .

#### (iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width):Open, forested and scrub-shrub.
- Vegetation type/percent cover. Explain: trees, shrub and grasses, 100%.
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: Water source for small mammals and various insects, invertebrates and

amphibians.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 8

Approximately (2.65) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
у	0.2	у	1.96
у	0.03	у	0.36
n	0.01	n	0.02
n	0.03	n	0.02

Summarize overall biological, chemical and physical functions being performed: Sediment trapping and toxicant retention due to runoff from roadway, recreational trail and adjacent residential property; surface and groundwater protection by intercepting flows from adjacent development and treating it to reduce pollutants, toxicants and sediments, wildife habitat exists (diversity of cover types, food and water source), but it is limited due to the proximity of roadways and homes.

#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

# Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

# Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The wetlands are shallow depressional areas in a maintained lawn and wooded area. Although there is no apparent hydrologic connection to the ponds/stream (within about 350' of an existing pond), it is likely that overland flow passes through the wetlands before discharging to the ponds/stream during heavy rain events and spring runoff. The stream originates on this parcel and discharges to Lake Champlain. This portion of Burlington is developed by closely spaced housing, roadways and a recreational path. The stream and its adjacent wetlands play an important role in retaining sediments and reducing sediment and toxicant load to Lake Champlain.

# **D.** DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

- TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
   TNWs: linear feet width (ft), Or, acres.
   Wetlands adjacent to TNWs: acres.
- 2. RPWs that flow directly or indirectly into TNWs.

Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .

Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: The unnamed stream on the parcel is a tributary of Lake Champlain, a TNW, an international waterbody. Based on knowledge of the site and on its' drainage area (0.18 sq. mi.), it is reasonable to presume that the tributary flows continuously for at least three months out of the year and is, therefore, an RPW.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **250** linear feet **3** width (ft).
- Other non-wetland waters: **0.81** acres.

Identify type(s) of waters: 3 existing ponds.

### 3. <u>Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.</u>

Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

acres.

Tributary waters: linear feet width (ft).

Other non-wetland waters:

Identify type(s) of waters:

# 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetlands are immediately adjacent to and above OHW of the unnamed tributary and existing ponds. Based on our knowledge of the site and on its' drainage area (0.18 sq. mi.), it is reasonable to presume that the tributary flows continuously for at least three months out of the year and is, therefore, an RPW.

Provide acreage estimates for jurisdictional wetlands in the review area: 2.55 acres.

### 5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.08 acres.

### 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

### 7. Impoundments of jurisdictional waters.<sup>9</sup>



- As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E.	ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): <sup>10</sup> which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Identify water body and summarize rationale supporting determination:
	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
F.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):           Non-wetland waters (i.e., rivers, streams):         linear feet         width (ft).           Lakes/ponds:         acres.           Other non-wetland waters:         acres. List type of aquatic resource:         .
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):           Non-wetland waters (i.e., rivers, streams):         linear feet,         width (ft).           Lakes/ponds:         acres.           Other non-wetland waters:         acres.           Wetlands:         acres.
<u>SE(</u>	CTION IV: DATA SOURCES.
<b>A.</b>	<ul> <li>SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Entitled "WATERS OF THE U.S." (dated "MAY 13, 2010").</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study:Memo dated 14 March 1984.</li> <li>U.S. Geological Survey Hydrologic Atlas:</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name:Colchester Point,VT; 1:24,000.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation:</li> <li>National wetlands inventory map(s). Cite name:</li> </ul>

<sup>&</sup>lt;sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos*.

State/Local wetland inventory map(s):
FEMA/FIRM maps:
100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
Photographs: Aerial (Name & Date):
or Other (Name & Date):
Previous determination(s). File no. and date of response letter:
Applicable/supporting case law:
Applicable/supporting scientific literature:
Other information (please specify):

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The existing ponds and unnamed stream is a tributary of Lake Champlain, a TNW, an international waterbody. Based on our knowledge of the site and on its' drainage area (0.18 sq. mi.), it is reasonable to presume that the tributary flows continuously for at least three months out of the year and is, therefore, an RPW

#### APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

#### SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 22 September 2010

#### B. DISTRICT OFFICE, FILE NAME, AND NUMBER:NAE; VT Agency of Transportation/Champlain Parkway; NAE-2010-1705

#### C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:VT County/parish/borough: Chittenden City: Burlington

Center coordinates of site (lat/long in degree decimal format): Lat. 44.4607959° N, Long. 73.2169965° W.

Universal Transverse Mercator: 18

Name of nearest waterbody: Pine Street Barge Canal/Lake Champlain

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Champlain

Name of watershed or Hydrologic Unit Code (HUC): 0201000

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

#### D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: 8/26/10
- Field Determination. Date(s): 8/24/10

#### SECTION II: SUMMARY OF FINDINGS

## A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
- Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

### B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

- 1. Waters of the U.S.
  - a. Indicate presence of waters of U.S.in review area (check all that apply): <sup>1</sup>
    - TNWs, including territorial seas
    - Wetlands adjacent to TNWs
    - Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
    - Non-RPWs that flow directly or indirectly into TNWs
    - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
    - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
    - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
    - Impoundments of jurisdictional waters
    - Isolated (interstate or intrastate) waters, including isolated wetlands
  - b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: 0.19 acres.
  - c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
- 2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>
  - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: The subject water for this jurisdictional determination is a Phragmite-dominated wetland surrounded on all sides by pavement and development. The subject waters are more fully described in the Memorandum for the File documenting the site visit dated 25 August 2010. The wetlands are isolated intrastate waters with no outlet, no

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.





hydrological connection to Lake Champlain or to the Pine Street Barge Canal, no nexus to interstate commerce, and no significant nexus to Lake Champlain (located about 1200 feet west of the site).

#### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWS

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":

#### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.I for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

#### 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

 Watershed size:
 Pick List

 Drainage area:
 Pick List

 Average annual rainfall:
 inches

 Average annual snowfall:
 inches

## (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

Tributary flows directly into TNW.
 Tributary flows through Pick List tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW. Project waters are **Pick List** river miles from RPW. Project waters are **Pick List** aerial (straight) miles from TNW. Project waters are **Pick List** aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW<sup>5</sup>: . Tributary stream order, if known:

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to f low into tributary b, which then flows into TNW.

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Imatural         Imatural       Imatural
	Tributary properties with respect to top of bank (estimate):         Average width:       feet         Average depth:       feet         Average side slopes:       Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry: Pick List       .         Tributary gradient (approximate average slope):       %
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:
	Surface flow is: Pick List. Characteristics:
	Subsurface flow: <b>Pick List</b> . Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply):       Bed and banks         OHWM <sup>6</sup> (check all indicators that apply):       the presence of litter and debris         changes in the character of soil       destruction of terrestrial vegetation         shelving       the presence of wrack line         vegetation matted down, bent, or absent       sediment sorting         leaf litter disturbed or washed away       scour         sediment deposition       multiple observed or predicted flow events         water staining       abrupt change in plant community         other (list):       .
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
Che Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

(iii)

÷,

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.



- Riparian corridor. Characteristics (type, average width):
  - Wetland fringe. Characteristics:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

#### 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

### (i) Physical Characteristics:

- (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:

Surface flow is: Pick List Characteristics:

Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
       Ecological connection. Explain:
       Separated by berm/barrier. Explain:

## (d) Proximity (Relationship) to TNW

Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.

#### (ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:

# (iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width):
  - Vegetation type/percent cover. Explain:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

# 3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: Pick List

Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

# Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

# D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

- TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
   TNWs: linear feet width (ft), Or, acres.
   Wetlands adjacent to TNWs: acres.
- 2. RPWs that flow directly or indirectly into TNWs.
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
  - Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:



acres

- Tributary waters: linear feet width (ft).
- Other non-wetland waters:
  - Identify type(s) of waters:

#### 3. Non-RPWs8 that flow directly or indirectly into TNWs.

Waterbody that is not a TNW or an RPW,b ut flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional.Da ta supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: li Other non-wetland waters: linear feet width (ft).
  - acres.
    - Identify type(s) of waters:

#### 4 Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
- Uketlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

- 5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
  - Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional.Da ta supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

#### Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. 6.

Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres

- 7. Impoundments of jurisdictional waters.9
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
  - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
  - Demonstrate that water is isolated with a nexus to commerce (see E below).

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
   which are or could be used for industrial purposes by industries in interstate commerce.
   Interstate isolated waters. Explain:
   Other factors. Explain:

#### Identify water body and summarize rationale supporting determination:

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, I NCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): 10

<sup>\*</sup>See Footnote # 3.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>&</sup>lt;sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

Wetlands: acres.

#### F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:

Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

linear feet width (ft). Non-wetland waters (i.e., rivers, streams):

Lakes/ponds: acres.

Other non-wetland waters: acres. List type of aquatic resource:

 $\boxtimes$ Wetlands: 0.19 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). acres.

Lakes/ponds:

Other non-wetland waters: acres. List type of aquatic resource:

Wetlands: acres.

### SECTION IV: DATA SOURCES.

- A. SUPPORTING DATA. Data reviewed for JD (check all that apply checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
  - Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Plan entitled "SOUTHERN

CONNECTOR/CHAMPLAIN PARKWAY MEGC-M5000(1) FIGURE 4-28 WETLAND "A" IMPACTS", in one sheet, dated "10/11/2006".

- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- Office concurs with data sheets/delineation report.
- Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:NYD Draft Study 1976.
- U.S. Geological Survey Hydrologic Atlas:
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:1:24,000 Burlington, VT Quad.
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:

100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

- Photographs: Aerial (Name & Date):"Project Delineated Wetlands" (undated).
  - or Other (Name & Date): Hand-held digital photos taken 8/24/10.
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:

Other information (please specify):Memorandum for the File documenting site visit dated 8/25/10...

B. ADDITIONAL COMMENTS TO SUPPORT JD: The wetland is geographically isolated from another water. The nearest jurisdictional water, the Pine Street Barge Canal (a Superfund site), was historically connected to Lake Champlain (a TNW). A weir was



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constructed at its' outlet to Lake Champlain in 2001 as part of the Superfund cleanup. Lake Champlain is about 1200 linear ft. west of the subject wetland as the crow flies. Given its' position in the landscape surrounded on all sides by pavement and development, it is not reasonable to presume an ecological nexus. The wetland is non-navigable, isolated and intrastate. There are no features which would constitute a reasonable nexus with interstate commerce. In addition, the use, degradation or loss of this wetland will not affect other waters of the United States or affect interstate or foreign commerce.