

**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): November 7, 2007**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAE, Taunton Municipal Light Plant, 2007-707**

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

State: MA County/parish/borough: Franklin City: Taunton  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.864764° N, Long. 71.105994° W.  
Universal Transverse Mercator: 325213E 4636906N Zone 19

Name of nearest waterbody: Taunton River

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

Name of watershed or Hydrologic Unit Code (HUC): 6237100

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: November 5, 2007

Field Determination. Date(s):

**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: .

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

There **Pick List** "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 .1 acres.

Wetlands: .05 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: .

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

<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).

<sup>3</sup> 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: **Taunton River.**

Summarize rationale supporting determination: influenced by the tides from Mount Hope Bay.

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: Wetland along banks of Taunton River directly abut the TNW..

**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) Relationship with TNW:**

- 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>: .

<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>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:**  Natural  
 Artificial (man-made). Explain: .  
 Manipulated (man-altered). Explain: .

**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):

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover:  
 Other. Explain: .

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: **Pick List**. 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  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):  
 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):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: .

Identify specific pollutants, if known: .

<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) 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):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, .1 acres.
- Wetlands adjacent to TNWs: .05 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:

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: .

**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: 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: .
  - 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: 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 jurisdictional. 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: 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).

**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>8</sup>See Footnote # 3.

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

<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):

- 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-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.

**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: "Taunton municipal light plant" revised 9/18/07 on 5 sheets.
- 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: .
- 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: Somerset Scale 1:2000.
- 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 Geodetic 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: I all, IIa, IIb1, all, III A1, III A2, IID1, IV A.**

**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):** 23 Nov 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** CENAE-R; Pagano, Louis; NAE-2007-01532

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

State: MA County/parish/borough: Franklin City: Ashfield  
Center coordinates of site (lat/long in degree decimal format): Lat. 42.5179° N, Long. 72.7520° W.  
Universal Transverse Mercator: 4709745N, 684841E (Zone 18)

Name of nearest waterbody: South River

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

Name of watershed or Hydrologic Unit Code (HUC): 01080203 (Deerfield)

- 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: 16 Oct 2007  
 Field Determination. Date(s): 4 May 2007

**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: 500 linear feet: 10 width (ft) and/or 0.02 acres.  
Wetlands: 0 acres.

**c. Limits (boundaries) of jurisdiction based on: Established by OHWM.**

Elevation of established OHWM (if known): Unknown - Local Datum used.

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

<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).

<sup>3</sup> 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: [redacted].

Summarize rationale supporting determination: [redacted].

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": [redacted].

#### 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: [redacted] Pick List

Drainage area: [redacted] Pick List

Average annual rainfall: [redacted] inches

Average annual snowfall: [redacted] inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [redacted] tributaries before entering TNW.

Project waters are [redacted] river miles from TNW.

Project waters are [redacted] river miles from RPW.

Project waters are [redacted] aerial (straight) miles from TNW.

Project waters are [redacted] aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: [redacted].

Identify flow route to TNW<sup>5</sup>: [redacted].

Tributary stream order, if known: [redacted].

<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>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.

(b) General Tributary Characteristics (check all that apply):

**Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: [redacted]  
 Other. Explain: [redacted].

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].  
Presence of run/riffle/pool complexes. Explain: [redacted].  
Tributary geometry: **Relatively straight**  
Tributary gradient (approximate average slope): [redacted] %

(c) Flow:

Tributary provides for: **Pick List**  
Estimate average number of flow events in review area/year: **Pick List**  
Describe flow regime: [redacted].  
Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].  
 Dye (or other) test performed: [redacted].

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  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): [redacted]  
 Discontinuous OHWM.<sup>7</sup> Explain: [redacted].

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list): [redacted]

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
Explain: [redacted].  
Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, [REDACTED] acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: 3<sup>rd</sup> order stream indicated as perennial on USGS Quad. Designated by NMFS as EFH for Atlantic salmon (*Salmo salar*), which must have continuous, well-oxygenated water to survive.
  - 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: [REDACTED].

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

- Tributary waters: 500 linear feet 10 width (ft).
  - Other non-wetland waters: \_\_\_\_\_ acres.
- 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: \_\_\_\_\_ 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: \_\_\_\_\_.
- 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: \_\_\_\_\_ 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 jurisdictional. 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: \_\_\_\_\_ 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).

**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: \_\_\_\_\_.

<sup>8</sup>See Footnote # 3.

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

<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.

**Identify water body and summarize rationale supporting determination:** [redacted].

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

- Tributary waters: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: **Guntlow & Associates.**
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **1: 25000 Ashfield, MA; 1984.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): **Site Photographs, 5/4/2007.**
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** **Perennial river managed by State and Federal fisheries agencies for Atlantic salmon, very obviously has perennial flow.**



**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):** July 27, 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** NAE, Lawrence Gateway, 2007-1771

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

State: MA County/parish/borough: Essex City: Lawrence  
Center coordinates of site (lat/long in degree decimal format): Lat. 42.7073° N, Long. 71.1491° E.  
Universal Transverse Mercator: UTM 19 323993E 4730332N (NAD27)

Name of nearest waterbody: Spicket River

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

Name of watershed or Hydrologic Unit Code (HUC): Spicket River Watershed, a sub-basin of the Merrimac river

- 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: [redacted]  
 Field Determination. Date(s): June 29, 2007

**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: [redacted].

**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: 1800 linear feet: 20 width (ft) and/or [redacted] acres.  
Wetlands: 0 acres.

**c. Limits (boundaries) of jurisdiction based on: Not Applicable.**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: [redacted].

Summarize rationale supporting determination: [redacted].

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": [redacted].

#### 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: 4 square miles  
Average annual rainfall: 46.7 inches  
Average annual snowfall: 57.0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through 2 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: [redacted].

Identify flow route to TNW<sup>5</sup>: raceway to Spicket River to Merrimac.  
Tributary stream order, if known: [redacted].

<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>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.

(b) General Tributary Characteristics (check all that apply):

Tributary is:  Natural  
 Artificial (man-made). Explain: **raceway**.  
 Manipulated (man-altered). Explain: **a cofferdam has been installed to block flow of water from raceway, however the dam is not effective and water flows through the dam creating a channel that flows to the Spicket River.**

Tributary properties with respect to top of bank (estimate):

Average width: **20** feet  
Average depth: **2** feet  
Average side slopes: **Vertical (1:1 or less)**.

Primary tributary substrate composition (check all that apply):

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover:   
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **vertical block wall**.

Presence of run/riffle/pool complexes. Explain: .

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): **2** %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: **Flow from upland drainage**.

Other information on duration and volume: .

Surface flow is: **Confined**. Characteristics: .

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  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):   
 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):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: **water color is clear**.

Identify specific pollutants, if known: .

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, [REDACTED] acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: **Flow from Merrimac River enters the canal system, flows through the penstock and raceway and into the Spicket River. Also, sheet flow from upland draingae flows into the raceway and then to the Spicket River.**
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

<sup>8</sup>See Footnote # 3.

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

<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.

**Identify water body and summarize rationale supporting determination:** [redacted].

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

- Tributary waters: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: **Figure 5-2, Limits of Engineered Barrier, Gencorp Inc., Lawrence, Massachusetts dated 5/14/03.**
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **Lawrence.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): **Corps site inspection photographs dated June 29, 2007.**
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** **Perennial stream with no bordering wetlands required the following sections be completed: I (all), II B1 a&c, III D2, IV A (B if needed).**



**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):** July 12, 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** New England District, Charlotte Florence, NAE-2007-1997

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

State: Massachusetts County/parish/borough: Barnstable City: Mashpee  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.5581° N, Long. 70.4778° W.  
Universal Transverse Mercator: [redacted]

Name of nearest waterbody: Nantucket Sound

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

Name of watershed or Hydrologic Unit Code (HUC): Cape Cod

- 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: July 12, 2007  
 Field Determination. Date(s): May 2, 2007

**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: [redacted].

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

There **Pick List** "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: [redacted] linear feet: [redacted] width (ft) and/or [redacted] acres.  
Wetlands: [redacted] acres.

**c. Limits (boundaries) of jurisdiction based on: Pick List**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: [redacted].

Summarize rationale supporting determination: [redacted].

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: [redacted].

#### 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: [redacted] Pick List

Drainage area: [redacted] Pick List

Average annual rainfall: [redacted] inches

Average annual snowfall: [redacted] inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [redacted] tributaries before entering TNW.

Project waters are [redacted] river miles from TNW.

Project waters are [redacted] river miles from RPW.

Project waters are [redacted] aerial (straight) miles from TNW.

Project waters are [redacted] aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: [redacted].

Identify flow route to TNW<sup>5</sup>: [redacted].

Tributary stream order, if known: [redacted].

<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>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.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

- Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |   |                                   |
|--|---|-----------------------------------|
| <input type="checkbox"/> Silts                       | <input type="checkbox"/> Sands                                | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                     | <input type="checkbox"/> Gravel                               | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                     | <input type="checkbox"/> Vegetation. Type/% cover: [redacted] |                                   |
| <input type="checkbox"/> Other. Explain: [redacted]. |   |                                   |

- Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].  
Presence of run/riffle/pool complexes. Explain: [redacted].  
Tributary geometry: **Pick List**  
Tributary gradient (approximate average slope): [redacted] %

(c) Flow:

- Tributary provides for: **Pick List**  
Estimate average number of flow events in review area/year: **Pick List**  
Describe flow regime: [redacted].  
Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

- Subsurface flow: **Pick List**. Explain findings: [redacted].  
 Dye (or other) test performed: [redacted].

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):  |   |
| <input type="checkbox"/> clear, natural line impressed on the bank             | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                      | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent               | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                  | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): [redacted]                              |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: [redacted]. |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): [redacted]                  |  |

(iii) **Chemical Characteristics:**

- Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
Explain: [redacted].  
Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, [REDACTED] acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: [REDACTED].
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: **Permit plans.**
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: [redacted].
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): **Site photos taken on May 2, 2007.**
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: **This is a revetment that abuts Nantucket Sound. It is an area subject to the tides.****

**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):** July 12, 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** New England District, Peter and Anne Moran, NAE-2007-1998

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

State: Massachusetts County/parish/borough: Barnstable City: Mashpee  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.5581° N, Long. 70.4778° W.  
Universal Transverse Mercator: [redacted]

Name of nearest waterbody: Nantucket Sound

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

Name of watershed or Hydrologic Unit Code (HUC): Cape Cod

- 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: July 12, 2007  
 Field Determination. Date(s): May 2, 2007

**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: [redacted].

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

There **Pick List** "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: [redacted] linear feet: [redacted] width (ft) and/or [redacted] acres.  
Wetlands: [redacted] acres.

**c. Limits (boundaries) of jurisdiction based on: Pick List**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: [redacted].

Summarize rationale supporting determination: [redacted].

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: [redacted].

#### 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: [redacted] Pick List

Drainage area: [redacted] Pick List

Average annual rainfall: [redacted] inches

Average annual snowfall: [redacted] inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [redacted] tributaries before entering TNW.

Project waters are [redacted] river miles from TNW.

Project waters are [redacted] river miles from RPW.

Project waters are [redacted] aerial (straight) miles from TNW.

Project waters are [redacted] aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: [redacted].

Identify flow route to TNW<sup>5</sup>: [redacted].

Tributary stream order, if known: [redacted].

<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>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.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

- Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |   |                                   |
|--|---|-----------------------------------|
| <input type="checkbox"/> Silts                       | <input type="checkbox"/> Sands                                | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                     | <input type="checkbox"/> Gravel                               | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                     | <input type="checkbox"/> Vegetation. Type/% cover: [redacted] |                                   |
| <input type="checkbox"/> Other. Explain: [redacted]. |   |                                   |

- Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].  
Presence of run/riffle/pool complexes. Explain: [redacted].  
Tributary geometry: **Pick List**  
Tributary gradient (approximate average slope): [redacted] %

(c) Flow:

- Tributary provides for: **Pick List**  
Estimate average number of flow events in review area/year: **Pick List**  
Describe flow regime: [redacted].  
Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

- Subsurface flow: **Pick List**. Explain findings: [redacted].  
 Dye (or other) test performed: [redacted].

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):  |   |
| <input type="checkbox"/> clear, natural line impressed on the bank             | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                      | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent               | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                  | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): [redacted]                              |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: [redacted]. |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): [redacted]                  |  |

(iii) **Chemical Characteristics:**

- Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
Explain: [redacted].  
Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, [REDACTED] acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: [REDACTED].
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: **Permit plans.**
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: [redacted].
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): **Site photos taken on May 2, 2007.**
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: **This is a revetment that abuts Nantucket Sound. It is an area subject to the tides.****

**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):** September 11, 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** NAE-Michael & Mary Fitzgerald, NAE-2007-02128, (Gardner)

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

State: MA County/parish/borough: PLYmouth City: Wareham  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.470° N, Long. 70.649° W.  
Universal Transverse Mercator: [redacted]

Name of nearest waterbody: Onset Bay

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

Name of watershed or Hydrologic Unit Code (HUC): 1090002

- 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: September 7, 2007  
 Field Determination. Date(s): [redacted]

**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: [redacted].

**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: [redacted] linear feet: [redacted] width (ft) and/or [redacted] acres.  
Wetlands: [redacted] acres.

**c. Limits (boundaries) of jurisdiction based on: Established by mean (average) high waters.**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: [redacted].

Summarize rationale supporting determination: [redacted].

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: [redacted].

#### 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: [redacted] Pick List

Drainage area: [redacted] Pick List

Average annual rainfall: [redacted] inches

Average annual snowfall: [redacted] inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [redacted] tributaries before entering TNW.

Project waters are [redacted] river miles from TNW.

Project waters are [redacted] river miles from RPW.

Project waters are [redacted] aerial (straight) miles from TNW.

Project waters are [redacted] aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: [redacted].

Identify flow route to TNW<sup>5</sup>: [redacted].

Tributary stream order, if known: [redacted].

<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>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.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

- Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |   |                                   |
|--|---|-----------------------------------|
| <input type="checkbox"/> Silts                       | <input type="checkbox"/> Sands                                | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                     | <input type="checkbox"/> Gravel                               | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                     | <input type="checkbox"/> Vegetation. Type/% cover: [redacted] |                                   |
| <input type="checkbox"/> Other. Explain: [redacted]. |   |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):  |   |
| <input type="checkbox"/> clear, natural line impressed on the bank             | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                      | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent               | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                  | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): [redacted]                              |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: [redacted]. |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): [redacted]                  |  |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, [REDACTED] acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: [REDACTED].
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: [redacted].
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Plymouth.
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): [redacted].
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: [redacted].**

**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): September 18, 2007**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAE, Chicopee Levee Maintenance, 2007-2549**

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

State: MA County/parish/borough: City: Chicopee  
Center coordinates of site (lat/long in degree decimal format): Lat. 42.16° N, Long. -72.6239° W.  
Universal Transverse Mercator:

Name of nearest waterbody: Connecticut River

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

Name of watershed or Hydrologic Unit Code (HUC): Connecticut River

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:

Field Determination. Date(s): July 10, 2007

**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: Connecticut River is a major interstate waterway.

**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: 11640 linear feet: 100 width (ft) and/or [redacted] acres.

Wetlands: 0 acres.

**c. Limits (boundaries) of jurisdiction based on: Established by OHWM.**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: Connecticut River

Summarize rationale supporting determination: Connecticut River has been previously recognized as having been used for interstate commerce as it does span 4 states..

**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: **Pick List**  
Drainage area: **Pick List**  
Average annual rainfall: **Pick List** inches  
Average annual snowfall: **Pick List** inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

- 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: **Pick List**.

Identify flow route to TNW<sup>5</sup>: **Pick List**.

<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>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: [redacted].

(b) **General Tributary Characteristics (check all that apply):**

**Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: [redacted]  
 Other. Explain: [redacted].

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

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  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): [redacted]  
 Discontinuous OHWM.<sup>7</sup> Explain: [redacted].

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list): [redacted]

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

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

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

**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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

**(b) General Flow Relationship with Non-TNW:**

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

**(c) Wetland Adjacency Determination with Non-TNW:**

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

**(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

Riparian buffer. Characteristics (type, average width): [redacted].

Vegetation type/percent cover. Explain: [redacted].

Habitat for:

Federally Listed species. Explain findings: [redacted].

Fish/spawn areas. Explain findings: [redacted].

Other environmentally-sensitive species. Explain findings: [redacted].

Aquatic/wildlife diversity. Explain findings: [redacted].

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:  
 TNWs: 11640 [REDACTED] linear feet 100 width (ft), Or, [REDACTED] acres.  
 Wetlands adjacent to TNWs: 0 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: [REDACTED].  
 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: Notice of Intent provided by Baystate Environmental Consultants dated September 2007..
- 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.
- Field notes prepared by the Corps: site visit of July 10, 2007 by Karen Adams & Scott Michalak.
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:.
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):.  or Other (Name & Date):.
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: [redacted].**

**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):** September 21, 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** New England District, Richard Macara, NAE-2007-2609

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

State: Massachusetts County/parish/borough: Barnstable City: Wellfleet  
Center coordinates of site (lat/long in degree decimal format): Lat. 42.05° N, Long. 70.15° W.  
Universal Transverse Mercator: [redacted]

Name of nearest waterbody: Provincetown Harbor

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Cape Cod Bay, Atlantic Ocean

Name of watershed or Hydrologic Unit Code (HUC): Cape Cod

- 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: September 21, 2007  
 Field Determination. Date(s): [redacted]

**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: [redacted].

**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: ~209 linear feet: ~209 width (ft) and/or 1.0 acres.  
Wetlands: [redacted] acres.

**c. Limits (boundaries) of jurisdiction based on: Established by mean (average) high waters.**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: **Provincetown Harbor, the Atlantic Ocean.**

Summarize rationale supporting determination: **[redacted]**.

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: **[redacted]**.

**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: **[redacted] Pick List**

Drainage area: **[redacted] Pick List**

Average annual rainfall: **[redacted]** inches

Average annual snowfall: **[redacted]** inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

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: **[redacted]**.

Identify flow route to TNW<sup>5</sup>: **[redacted]**.

Tributary stream order, if known: **[redacted]**.

<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>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.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

- Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |   |                                   |
|--|---|-----------------------------------|
| <input type="checkbox"/> Silts                       | <input type="checkbox"/> Sands                                | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                     | <input type="checkbox"/> Gravel                               | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                     | <input type="checkbox"/> Vegetation. Type/% cover: [redacted] |                                   |
| <input type="checkbox"/> Other. Explain: [redacted]. |   |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):  |   |
| <input type="checkbox"/> clear, natural line impressed on the bank             | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                      | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent               | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                  | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): [redacted]                              |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: [redacted]. |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): [redacted]                  |  |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: ~209 linear feet ~209 width (ft), Or, 1.0 acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: [REDACTED].
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: **Locus map and aquaculture grant location plans.**
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: [redacted].
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): [redacted].
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** **The aquaculture grant location is below the high tide line in Provincetown Harbor which is in the Atlantic Ocean. The activity is Section 10 only and is located in an area that is subject to the ebb and flow of the tide.**

**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): October 5, 2007**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAE, West Springfield/Flood Control (Levee Maintenance) 2007-2613**

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

State: MA County/parish/borough: City: West Springfield  
Center coordinates of site (lat/long in degree decimal format): Lat. 42.139° N, Long. -72.618° W.  
Universal Transverse Mercator:

Name of nearest waterbody: Connecticut River

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

Name of watershed or Hydrologic Unit Code (HUC): Connecticut River

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:

Field Determination. Date(s): July 10, 2007

**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: Connecticut River is a major interstate waterway and has previously been determined to be navigable. A copy of the navigability study is attached.

**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: 11640 linear feet: 100 width (ft) and/or [redacted] acres.

Wetlands: 0 acres.

**c. Limits (boundaries) of jurisdiction based on: Established by OHWM.**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: Connecticut River

Summarize rationale supporting determination: Connecticut River has been previously recognized as having been used for interstate commerce as it does span 4 states.

**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: **Pick List**  
Drainage area: **Pick List**  
Average annual rainfall: **Pick List** inches  
Average annual snowfall: **Pick List** inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

- 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: **Pick List**.

Identify flow route to TNW<sup>5</sup>: **Pick List**.

<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>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: [redacted].

(b) **General Tributary Characteristics (check all that apply):**

**Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: [redacted]  
 Other. Explain: [redacted].

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

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  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): [redacted]  
 Discontinuous OHWM.<sup>7</sup> Explain: [redacted].

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list): [redacted]

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

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

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

**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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

**(b) General Flow Relationship with Non-TNW:**

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

**(c) Wetland Adjacency Determination with Non-TNW:**

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

**(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

Riparian buffer. Characteristics (type, average width): [redacted].

Vegetation type/percent cover. Explain: [redacted].

Habitat for:

Federally Listed species. Explain findings: [redacted].

Fish/spawn areas. Explain findings: [redacted].

Other environmentally-sensitive species. Explain findings: [redacted].

Aquatic/wildlife diversity. Explain findings: [redacted].

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:  
 TNWs: 23,300 linear feet 100 width (ft), Or, [REDACTED] acres.  
 Wetlands adjacent to TNWs: 0 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: [REDACTED].  
 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: Notice of Intent provided by Baystate Environmental Consultants dated September 2007..
- 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.
- Field notes prepared by the Corps: site visit of July 10, 2007 by Karen Adams & Scott Michalak.
- Corps navigable waters' study: "Report on the Navigable Status of Connecticut River, Connecticut, Massachusetts, Vermont, New Hampshire".
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:.
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:
  - Aerial (Name & Date):.
  - or Other (Name & Date):.
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: [redacted].**

**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): October 5, 2007**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:NAE, West Springfield/Flood Control (Levee Maintenance) 2007-2613**

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

State:MA County/parish/borough: City: West Springfield  
Center coordinates of site (lat/long in degree decimal format): Lat. 42.139° **N**, Long. -72.618° **W**.  
Universal Transverse Mercator:

Name of nearest waterbody: Westfield River

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

Name of watershed or Hydrologic Unit Code (HUC): Connecticut River

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:

Field Determination. Date(s): July 10, 2007

**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: Connecticut River is a major interstate waterway and has previously been determined to be navigable. A copy of the Westfield River navigability study is attached. It was recommended to be navigable to mile 47.1 .

**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: 11640 linear feet: 100 width (ft) and/or [redacted] acres.

Wetlands: 0 acres.

**c. Limits (boundaries) of jurisdiction based on: Established by OHWM.**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: Connecticut River

Summarize rationale supporting determination: Connecticut River has been previously recognized as having been used for interstate commerce as it does span 4 states.

- 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: **Pick List**
- Drainage area: **Pick List**
- Average annual rainfall:  inches
- Average annual snowfall:  inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

- 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>: .

<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>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: [redacted].

(b) **General Tributary Characteristics (check all that apply):**

**Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: [redacted]  
 Other. Explain: [redacted].

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

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  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): [redacted]  
 Discontinuous OHWM.<sup>7</sup> Explain: [redacted].

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list): [redacted]

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

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

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

**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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

**(b) General Flow Relationship with Non-TNW:**

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

**(c) Wetland Adjacency Determination with Non-TNW:**

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

**(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

Riparian buffer. Characteristics (type, average width): [redacted].

Vegetation type/percent cover. Explain: [redacted].

Habitat for:

Federally Listed species. Explain findings: [redacted].

Fish/spawn areas. Explain findings: [redacted].

Other environmentally-sensitive species. Explain findings: [redacted].

Aquatic/wildlife diversity. Explain findings: [redacted].

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

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

Approximately ( [redacted] ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: 10600 linear feet 100 width (ft), Or, [REDACTED] acres.
- Wetlands adjacent to TNWs: 0 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: [REDACTED].
- 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: Notice of Intent provided by Baystate Environmental Consultants dated September 2007..
- 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.
- Field notes prepared by the Corps: site visit of July 10, 2007 by Karen Adams & Scott Michalak.
- Corps navigable waters' study: "Report on the Navigable Status of Connecticut River, Connecticut, Massachusetts, Vermont, New Hampshire".
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:.
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):.  
 or Other (Name & Date):.
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: [redacted].**

**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):** November 19, 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** New England District, NAE-2007-2994

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

State: Massachusetts County/parish/borough: Hampden City: Chester  
Center coordinates of site (lat/long in degree decimal format): Lat. 42 deg 18' 36 "° Pick List, Long. 72 deg 55' 01"° Pick List.  
Universal Transverse Mercator: [redacted]

Name of nearest waterbody: Middle Branch Westfield River

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

Name of watershed or Hydrologic Unit Code (HUC): 1080206 (USGS Hydrologic Unit Code)

- 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: November 19, 2007  
 Field Determination. Date(s): [redacted]

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Pick List** "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: [redacted].

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

There **Pick List** "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: 50 linear feet: 50 width (ft) and/or [redacted] acres.  
Wetlands: [redacted] acres.

**c. Limits (boundaries) of jurisdiction based on: Established by OHWM.**

Elevation of established OHWM (if known): GET This.

**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: [redacted].

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

<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).

<sup>3</sup> 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: [redacted].

Summarize rationale supporting determination: [redacted].

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: [redacted].

#### 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: [redacted] Pick List

Drainage area: [redacted] Pick List

Average annual rainfall: [redacted] inches

Average annual snowfall: [redacted] inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [redacted] tributaries before entering TNW.

Project waters are [redacted] river miles from TNW.

Project waters are [redacted] river miles from RPW.

Project waters are [redacted] aerial (straight) miles from TNW.

Project waters are [redacted] aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: [redacted].

Identify flow route to TNW<sup>5</sup>: [redacted].

Tributary stream order, if known: [redacted].

<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>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.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

- Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |   |                                   |
|--|---|-----------------------------------|
| <input type="checkbox"/> Silts                       | <input type="checkbox"/> Sands                                | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                     | <input type="checkbox"/> Gravel                               | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                     | <input type="checkbox"/> Vegetation. Type/% cover: [redacted] |                                   |
| <input type="checkbox"/> Other. Explain: [redacted]. |   |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):  |   |
| <input type="checkbox"/> clear, natural line impressed on the bank             | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                      | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent               | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                  | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): [redacted]                              |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: [redacted]. |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): [redacted]                  |  |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, [REDACTED] acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: **The Middle Branch Westfield River is a large stream in the Federal Wild and Scenic River system.**
  - 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: [REDACTED].

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

- Tributary waters: 50 linear feet 50 width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: **Figures 1, 2, and 3.**
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **1:25000 Chester quad, 1997.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): **Taken by John Sargent, Nov 2, 2007.**
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: [redacted].**

**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):** 12 November 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** NAE 2006-4296 Town of Westport - Cape Cod Bay Disposal Site

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

State: Mass County/parish/borough: Barnstable City: none  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.9067° N, Long. 70.2217° W.  
Universal Transverse Mercator: [redacted]

Name of nearest waterbody: Atlantic Ocean/Cape Cod Bay

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

Name of watershed or Hydrologic Unit Code (HUC): 1090002

- 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: [redacted]  
 Field Determination. Date(s): [redacted]

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Pick List** "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: [redacted].

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

There **Pick List** "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: [redacted] linear feet: [redacted] width (ft) and/or 2 acres.  
Wetlands: [redacted] acres.

**c. Limits (boundaries) of jurisdiction based on: within 3-mile baseline**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: **Atlantic Ocean**.

Summarize rationale supporting determination: **These are ocean waters**.

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: **[redacted]**.

**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: **[redacted] Pick List**

Drainage area: **[redacted] Pick List**

Average annual rainfall: **[redacted]** inches

Average annual snowfall: **[redacted]** inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

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: **[redacted]**.

Identify flow route to TNW<sup>5</sup>: **[redacted]**.

Tributary stream order, if known: **[redacted]**.

<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>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.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

- Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |   |                                   |
|--|---|-----------------------------------|
| <input type="checkbox"/> Silts                       | <input type="checkbox"/> Sands                                | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                     | <input type="checkbox"/> Gravel                               | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                     | <input type="checkbox"/> Vegetation. Type/% cover: [redacted] |                                   |
| <input type="checkbox"/> Other. Explain: [redacted]. |   |                                   |

- Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].  
Presence of run/riffle/pool complexes. Explain: [redacted].  
Tributary geometry: **Pick List**  
Tributary gradient (approximate average slope): [redacted] %

(c) Flow:

- Tributary provides for: **Pick List**  
Estimate average number of flow events in review area/year: **Pick List**  
Describe flow regime: [redacted].  
Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

- Subsurface flow: **Pick List**. Explain findings: [redacted].  
 Dye (or other) test performed: [redacted].

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):  |   |
| <input type="checkbox"/> clear, natural line impressed on the bank             | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                      | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent               | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                  | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): [redacted]                              |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: [redacted]. |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): [redacted]                  |  |

(iii) **Chemical Characteristics:**

- Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
Explain: [redacted].  
Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, 845.100 (3.42 sq. kilometers) acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: [REDACTED].
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: Sheet 6 of permit drawings dated 12/15/06 and a revision dated 7/12/07 and titled "PROPOSED MAINTENANCE DREDGING PLAN, WESTPORT TOWN WHARVES & CREEK".
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: [redacted].
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): [redacted].
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): NOAA Coastal Chart #13246 Cape Cod and Corps NAE DAMOS information sheet from NAE web site.

**B. ADDITIONAL COMMENTS TO SUPPORT JD: the site is inside the base line from which the territorial sea is measured but is part of the Atlantic Ocean.**



**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):** 12 November 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** New England District, Town of Westport, NAE 2006-4296 - Dredging site near Town Wharves.

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

State: Massachusetts County/parish/borough: Bristol City: Westport  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.5160° N, Long. 71.0716° W.  
Universal Transverse Mercator: UTM 19 327132 E 4597898 N (NAD 27)

Name of nearest waterbody: Westport Harbor

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: [redacted]

Name of watershed or Hydrologic Unit Code (HUC): 01090002

- 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: 12 November 2007  
 Field Determination. Date(s): [redacted]

**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: [redacted].

**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: [redacted] linear feet: [redacted] width (ft) and/or 2 acres.  
Wetlands: [redacted] acres.

**c. Limits (boundaries) of jurisdiction based on: Established by mean (average) high waters.**

Elevation of established OHWM (if known): [redacted].

**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: [redacted].

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

<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).

<sup>3</sup> 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: **Westport Harbor and East Branch Westport River.**

Summarize rationale supporting determination: **Westport Harbor and the East Branch of the Westport River are waterways that are subject to the ebb and flow of the tide off of a coastal arm of the Atlantic Ocean (Buzzards Bay).**

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: **[redacted]**.

**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: **[redacted] Pick List**  
Drainage area: **[redacted] Pick List**  
Average annual rainfall: **[redacted]** inches  
Average annual snowfall: **[redacted]** inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

- 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: **[redacted]**.

Identify flow route to TNW<sup>5</sup>: **[redacted]**.

<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>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: [redacted].

(b) **General Tributary Characteristics (check all that apply):**

- Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |   |                                   |
|--|---|-----------------------------------|
| <input type="checkbox"/> Silts                       | <input type="checkbox"/> Sands                                | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles                     | <input type="checkbox"/> Gravel                               | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock                     | <input type="checkbox"/> Vegetation. Type/% cover: [redacted] |                                   |
| <input type="checkbox"/> Other. Explain: [redacted]. |   |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply):  |   |
| <input type="checkbox"/> clear, natural line impressed on the bank             | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                      | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent               | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                  | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): [redacted]                              |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: [redacted]. |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by:              | <input type="checkbox"/> Mean High Water Mark indicated by:            |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): [redacted]                  |  |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, 2 acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: [REDACTED].
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: "PROPOSED MAINTENANCE DREDGING PLAN, WESTPORT TOWN WHARVES & CREEK IN WESTPORT HARBOR, MA AT: 2061 MAIN ROAD COUNTY OF: BRISTOL TOWN OF: WESTPORT", on 6 sheets, and dated "12/15/06" with a revision dated "7/12/07."
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Westport Quad, 1 - 25,000.
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): [redacted].
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: [redacted].**



**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):** 12 November 2007

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** New England District, Town of Westport, NAE 2006-4296 - Eelgrass Mitigation Site.

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

State: Massachusetts County/parish/borough: Bristol City: Westport  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.5169° N, Long. 71.0705° W.  
Universal Transverse Mercator: UTM 19 327223 E 4598001 N (NAD 27)

Name of nearest waterbody: Westport Harbor and East Branch Westport River

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

Name of watershed or Hydrologic Unit Code (HUC): 01090002

- 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: 12 November 2007  
 Field Determination. Date(s):

**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:

**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: linear feet: width (ft) and/or 2 acres.  
Wetlands: acres.

**c. Limits (boundaries) of jurisdiction based on: Established by mean (average) high waters.**

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:

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

<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).

<sup>3</sup> 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: **Westport Harbor and East Branch Westport River.**

Summarize rationale supporting determination: **Westport Harbor and the East Branch of the Westport River are waterways that are subject to the ebb and flow of the tide off of a coastal arm of the Atlantic Ocean (Buzzards Bay).**

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: **[redacted]**.

**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: **[redacted] Pick List**  
Drainage area: **[redacted] Pick List**  
Average annual rainfall: **[redacted]** inches  
Average annual snowfall: **[redacted]** inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

- 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: **[redacted]**.

Identify flow route to TNW<sup>5</sup>: **[redacted]**.

<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>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: [redacted].

(b) **General Tributary Characteristics (check all that apply):**

**Tributary is:**  Natural  
 Artificial (man-made). Explain: [redacted].  
 Manipulated (man-altered). Explain: [redacted].

**Tributary properties with respect to top of bank (estimate):**

Average width: [redacted] feet  
Average depth: [redacted] feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: [redacted]  
 Other. Explain: [redacted].

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: [redacted].

Presence of run/riffle/pool complexes. Explain: [redacted].

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): [redacted] %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: [redacted].

Other information on duration and volume: [redacted].

Surface flow is: **Pick List**. Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

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  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): [redacted]  
 Discontinuous OHWM.<sup>7</sup> Explain: [redacted].

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list): [redacted]

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: [redacted].

Identify specific pollutants, if known: [redacted].

<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): [redacted].
- Wetland fringe. Characteristics: [redacted].
- Habitat for:
  - Federally Listed species. Explain findings: [redacted].
  - Fish/spawn areas. Explain findings: [redacted].
  - Other environmentally-sensitive species. Explain findings: [redacted].
  - Aquatic/wildlife diversity. Explain findings: [redacted].

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: [redacted] acres

Wetland type. Explain: [redacted].

Wetland quality. Explain: [redacted].

Project wetlands cross or serve as state boundaries. Explain: [redacted].

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: [redacted].

Surface flow is: **Pick List**

Characteristics: [redacted].

Subsurface flow: **Pick List**. Explain findings: [redacted].

Dye (or other) test performed: [redacted].

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: [redacted].

Ecological connection. Explain: [redacted].

Separated by berm/barrier. Explain: [redacted].

(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: [redacted].

Identify specific pollutants, if known: [redacted].

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

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

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

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

Approximately ([redacted]) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Summarize overall biological, chemical and physical functions being performed: [REDACTED].

### 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: [REDACTED].
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: [REDACTED].
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: [REDACTED].

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: [REDACTED] linear feet [REDACTED] width (ft), Or, 2 acres.
  - Wetlands adjacent to TNWs: [REDACTED] 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: [REDACTED].
  - 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: [REDACTED].

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

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

**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: [redacted] linear feet [redacted] width (ft).
  - Other non-wetland waters: [redacted] acres.
- Identify type(s) of waters: [redacted].

**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: [redacted].
  - 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: [redacted].

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: [redacted] 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: [redacted] 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).

**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: [redacted].
- Other factors. Explain: [redacted].

**Identify water body and summarize rationale supporting determination:** [redacted].

<sup>8</sup>See Footnote # 3.

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

<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: [redacted] linear feet [redacted] width (ft).
- Other non-wetland waters: [redacted] acres.  
Identify type(s) of waters: [redacted].
- Wetlands: [redacted] 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: [redacted].
- Other: (explain, if not covered above): [redacted].

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):

- Non-wetland waters (i.e., rivers, streams): [redacted] linear feet [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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): [redacted] linear feet, [redacted] width (ft).
- Lakes/ponds: [redacted] acres.
- Other non-wetland waters: [redacted] acres. List type of aquatic resource: [redacted].
- Wetlands: [redacted] 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: "PROPOSED MAINTENANCE DREDGING PLAN, WESTPORT TOWN WHARVES & CREEK IN WESTPORT HARBOR, MA AT: 2061 MAIN ROAD COUNTY OF: BRISTOL TOWN OF: WESTPORT", on 6 sheets, and dated "12/15/06" with a revision dated "7/12/07."
- 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: [redacted].
- Corps navigable waters' study: [redacted].
- U.S. Geological Survey Hydrologic Atlas: [redacted].
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Westport Quad, 1 - 25,000.
- USDA Natural Resources Conservation Service Soil Survey. Citation: [redacted].
- National wetlands inventory map(s). Cite name: [redacted].
- State/Local wetland inventory map(s): [redacted].
- FEMA/FIRM maps: [redacted].
- 100-year Floodplain Elevation is: [redacted] (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): [redacted].  
or  Other (Name & Date): [redacted].
- Previous determination(s). File no. and date of response letter: [redacted].
- Applicable/supporting case law: [redacted].
- Applicable/supporting scientific literature: [redacted].
- Other information (please specify): [redacted].

**B. ADDITIONAL COMMENTS TO SUPPORT JD: [redacted].**

