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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 29-Mar-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2008-01547-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :CT - ConnecticutCounty/parish/borough:New London

 City:
 Mystic

 Lat:
 41.34709

 Long:
 -71.96727

Universal Transverse Mercator Folder UTM List

UTM list determined by folder location

• NAD83 / UTM zone 19N

Waters UTM List

UTM list determined by waters location

• NAD83 / UTM zone 19N

Name of nearest waterbody: Mystic River
Name of nearest Traditional Navigable Water (TNW): Mystic River

Name of watershed or Hydrologic Unit Code (HUC):

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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 29-Mar-2010

Field Determination Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

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

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: The Mystic River is used for recreational and commercial navigation.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area: 1

| Water Name | Water Type(s) Present |
|----------------------------|----------------------------------|
| dredge new slips - 08-1547 | TNWs, including territorial seas |

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

Area: (m²) Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: []

OHWM Elevation: $\frac{\text{(if known)}}{\text{(if known)}}$

2. Non-regulated waters/wetlands:³

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1 TNW

| 1.11W | | | |
|------------------------|---|--|--|
| TNW Name | Summarize rationale supporting determination: | | |
| dredge new slips - 08- | The Mystic River is a navigable water of the United States, is tidally influenced and supports interstate | | |
| 1547 | commerce. | | |

2. Wetland Adjacent to TNW

Not Applicable.

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
- (i) General Area Conditions:

Watershed size: []
Drainage area: []
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [] tributaries before entering TNW.

:Number of tributaries

Project waters are [] river miles from TNW.

Project waters are [] river miles from RPW.

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

(i) Physical Characteristics:

Size (Linear) (m)

Size (Area) (m²)

Type

Wetland Name

| dredge new slips - 08-1547 | TNWs, including territorial seas | - | 5109.6672 | |
|----------------------------|----------------------------------|---|-----------|---|
| Total: | | 0 | 5109.6672 | l |

| 2. | RPWs | that flo | w directl | v or ir | ndirectly | into | TNWs: |
|----|-------------|----------|-----------|---------|-----------|------|-------|
|----|-------------|----------|-----------|---------|-----------|------|-------|

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:8

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

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

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Not Applicable.

7. Impoundments of jurisdictional waters: 9

Not Applicable.

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: 10

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

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 soley on the "Migratory Bird

| waters do not mee | the "Significant Nexu | ıs" standard, where su | ch a finding is required | or jurisdiction (Explain): | |
|-------------------|-----------------------|------------------------|--------------------------|----------------------------|--|
| | | | | | |
| Other (Explain): | | | | | |
| | | | | | |
| | | | | | |

judgment: Not Applicable.

ORM Printer Friendly JD Form

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.

Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below): Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

- 1-Boxes checked below shall be supported by completing the appropriate sections in Section III below.
- ²-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).
- 3-Supporting documentation is presented in Section III.F.
- ⁴-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- ⁵-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.
- 6-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.
- 7_{-Ibid}
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- 10-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.

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.

| Α. | REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 20, 20, 20, 20, 20, 20, 20, 20, 20, 20, |
|-----------|--|
| B. NAI | DISTRICT OFFICE, FILE NAME, AND NUMBER: NAE, Town of Manchester, CT - Lower Hop Brook Restoration Project, E-2008-2237 |
| C. | PROJECT LOCATION AND BACKGROUND INFORMATION: State:Connecticut County/parish/borough: Hartford City: Manchester Center coordinates of site (lat/long in degree decimal format): Lat. 41.7774° N, Long. 72.5644° W. Universal Transverse Mercator: 18 Name of nearest waterbody: Hop Brook Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hockanum River Name of watershed or Hydrologic Unit Code (HUC): Hockanum R watershed, 01080205 (flows to Connecticut R) 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, 2008 Field Determination. Date(s): |
| | CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION. |
| | re Are "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review [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: The Hockanum River is a navigable waterway, used by canoeists and kayakers, and is capable of being used for the transport of interstate or foreign commerce. |
| В. (| CWA SECTION 404 DETERMINATION OF JURISDICTION. |
| The | re 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): \[\text{TNWs, including territorial seas} \] \[\text{Wetlands adjacent to TNWs} \] \[\text{Relatively permanent waters}^2 (RPWs) that flow directly or indirectly into TNWs \] \[\text{Non-RPWs that flow directly or indirectly into TNWs} \] \[\text{Wetlands directly abutting RPWs that flow directly into TNWs} \] \[\text{Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs} \] \[\text{Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs} \] \[\text{Impoundments of jurisdictional waters} \] \[\text{Isolated (interstate or intrastate) waters, including isolated wetlands} \] |
| | b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 1800 linear feet: 25' width (ft) and/or acres. Wetlands: 0.31 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): ³ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: |

SECTION I: BACKGROUND INFORMATION

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.
² 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).
³ 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: Hockanum River.

Summarize rationale supporting determination: this river is well-known for canoeing and kayaking. It has also been listed as a navigable river in a Disposition Form concerning navigable rivers signed by the Chief, Regulatory Division dated March 14, 1984

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": wetlands in the vicinity of the confluence of Hop Brook and the Hockanum River are immediately contiguous with OHW of the Hockanum River.

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 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

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:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

| | Identify flow route to TNW ⁵ : 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: Average depth: 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) | 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ 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: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: physical datum; physical markings; vegetation lines/changes in vegetation types. |
| Cha | emical Characteristics: uracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ex |

(iii)

⁵ 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.

⁶A 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.

⁷Ibid.

| | (iv) | | tics (type, average width): |
|----|-------|--|---|
| 2. | Cha | racteristics of wetlands adjacent to | o non-TNW that flow directly or indirectly into TNW |
| | (i) | Physical Characteristics: (a) General Wetland Characteristic Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve | |
| | | (b) General Flow Relationship wit Flow is: Pick List . Explain: | |
| | | Surface flow is: Pick List Characteristics: | |
| | | Subsurface flow: Pick List . E Dye (or other) test perfe | |
| | | (c) Wetland Adjacency Determina Directly abutting Not directly abutting Discrete wetland hydro Ecological connection. Separated by berm/bar | ologic connection. Explain: |
| | | Flow is from: Pick List. | |
| | (ii) | Chemical Characteristics: Characterize wetland system (e.g., characteristics; etc.). Explain: Identify specific pollutants, if know | water color is clear, brown, oil film on surface; water quality; general watershed n: |
| | (iii) | Riparian buffer. Characteristic Vegetation type/percent cover. Habitat for: Federally Listed species. E Fish/spawn areas. Explain | Explain findings: findings: sitive species. Explain findings: |
| 3. | Cha | racteristics of all wetlands adjaced All wetland(s) being considered in Approximately () acres in to | |

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: 200 linear feet nearly 200' width (ft), Or, acres. ☐ Wetlands adjacent to TNWs: 0.31 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: drainage area of 11.9 square miles is highly supportive of perennial flow. ☐ 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: 1600 linear feet 25 width (ft). Other non-wetland waters: Identify type(s) of waters: |
|-----------|---|
| 3. | Non-RPWs ⁸ 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 jurisidictional. Data supporting this conclusion is provided at Section III.C. |
| | Provide acreage estimates for jurisdictional wetlands in the review area: acres. |
| 6. | Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C. |
| | Provide estimates for jurisdictional wetlands in the review area: acres. |
| 7. | Impoundments of jurisdictional waters. 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). |
| DE SUC | DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 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: |
| Ide | ntify water body and summarize rationale supporting determination: |

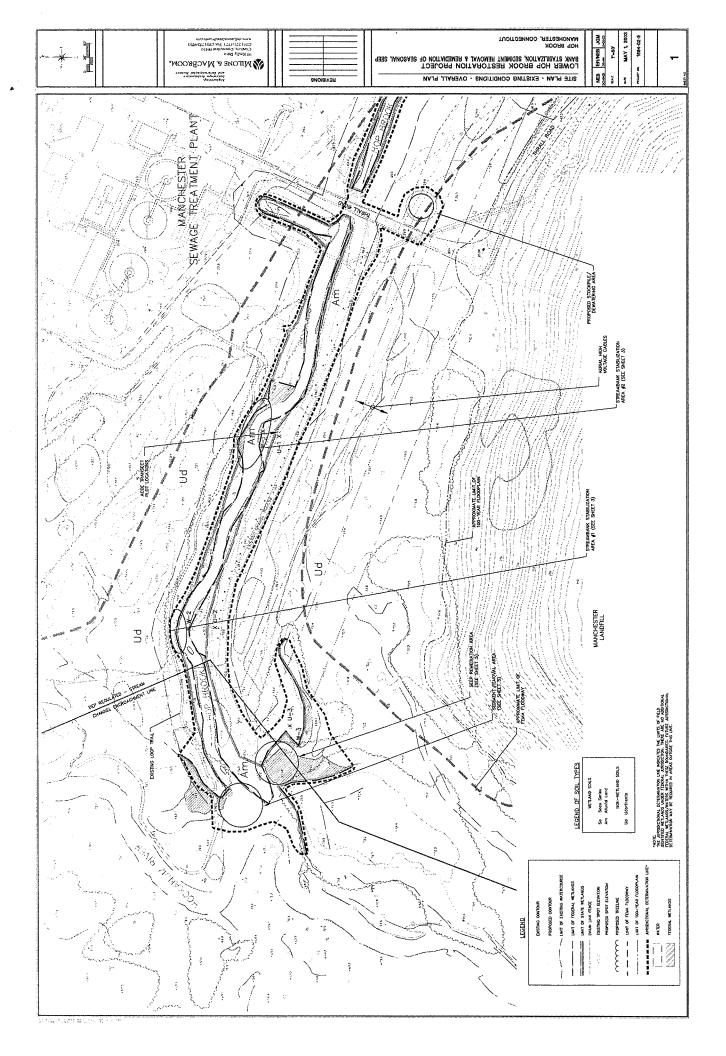
E.

See Footnote # 3.
 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 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 <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. |
| | Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-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. |
| SEC | CTION IV: DATA SOURCES. |
| | 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 No. 1 entitled "Site Plan - Existing Conditions - Overall Plan" and dated May 1, 2003. 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: Hockanum River listed as navigable in 3/14/84 Disposition Form signed by Chief of Regulatory Division. U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:1:24,000 Manchester, CT. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: |
| | Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify): |

B. ADDITIONAL COMMENTS TO SUPPORT JD: Hockanum River is a TNW. Hop Brook is a RPW, directly tributary to Hockanum River (TNW), and is relatively permanent as evidenced by its large (11.9 square mile) drainage area. There are wetlands at the confluence of

these two streams that can be clearly seen on the 1:24,000 Manchester 7.5' topo map. This particular JD is quite limited in area - it is only for the area within the dashed "Jurisdictional Limit" line clearly shown on "Sheet Number 1, Site Plan - Existing Conditions - Overall Plan" and dated May 1, 2003 - the narrow area within the dashed line includes only 4.8 acres immediately along the two streams. The JD is believed entirely sufficient to cover the reaches of river where work is proposed.



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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 18-Mar-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2010-00031-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: CT - Connecticut

County/parish/borough: Fairfield
City: Bridgeport
Lat: 41.17717
Long: -73.18401

Universal Transverse Mercator Folder UTM List

UTM list determined by folder location

• NAD83 / UTM zone 18N

Waters UTM List

UTM list determined by waters location

• NAD83 / UTM zone 18N

Name of nearest waterbody: Bridgeport Harbor
Name of nearest Traditional Navigable Water (TNW): Bridgeport Harbor

Name of watershed or Hydrologic Unit Code (HUC):

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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 18-Mar-2010

Field Determination Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

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

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: Bridgeport Harbor support commercial and recreational navigation and is a federally maintained navigation channel/anchorage area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area: 1

| Water Name | Water Type(s) Present |
|------------------------------------|----------------------------------|
| bloom bridgeport harbor relocation | TNWs, including territorial seas |

Area: (m²) Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: []

OHWM Elevation: $\frac{\text{(if known)}}{\text{(if known)}}$

2. Non-regulated waters/wetlands:³

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

| TNW Name | Summarize rationale supporting determination: |
|------------------------------------|--|
| bloom bridgeport harbor relocation | Bridgeport Harbor has a federally maintained channel and anchorage, supports recreational and commercial navigation. |

2. Wetland Adjacent to TNW

Not Applicable.

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
- (i) General Area Conditions:

Watershed size: []
Drainage area: []
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [] tributaries before entering TNW.

:Number of tributaries

Project waters are [] river miles from TNW.

Project waters are [] river miles from RPW.

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

(i) Physical Characteristics:

1. TNWs and Adjacent Wetlands:

| Wetland Name | Туре | Size (Linear) (m) | Size (Area) (m²) |
|--------------|------|-------------------|------------------|
| | | | |

| bloom bridgeport harbor relocation | TNWs, including territorial seas | - | 4046.85599999999999999999999999999999 |
|------------------------------------|----------------------------------|---|---------------------------------------|
| Total: | | 0 | 4046.85599999999999999999999999999999 |

| 2. RPWs th | at flow directly | or indirectly | into TNWs: |
|------------|------------------|---------------|------------|
|------------|------------------|---------------|------------|

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:8

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

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

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Not Applicable.

7. Impoundments of jurisdictional waters: 9

Not Applicable.

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: 10

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

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 soley 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):

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

Not Applicable.

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.

Not Applicable.

| SECTION IV: DATA SOURCES. | | | |
|---|--------------|---------------------------|--|
| A. SUPPORTING DATA. Data reviewed for JD (listed items shall be included in case file and, where checked and requested, appropriately referen | nce below): | | |
| Data Reviewed | Source Label | Source Description | |
| Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant | - | - | |

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

- 1-Boxes checked below shall be supported by completing the appropriate sections in Section III below.
- ²-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).
- ³-Supporting documentation is presented in Section III.F.
- 4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- 5-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.
- 6-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.
- 7_{-Ibid.}
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- ¹⁰-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.

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.

| SEC | CTION 1: BACKGROUND INFORMATION | |
|-----|---|--------------------|
| A. | REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (J | D): April 12, 2010 |

| B. | DISTRICT OFFICE, FILE NAME, AND NUMBER:NAE-2009-2132, Durham, Town, Coginchaug RHS, PM: Cori M. Rose |
|-----|---|
| C. | PROJECT LOCATION AND BACKGROUND INFORMATION: State:CT County/parish/borough: New Haven City: Durham Center coordinates of site (lat/long in degree decimal format): Lat. 41,47486° N, Long72.66904° L. Universal Transverse Mercator: 18 Name of nearest waterbody: Fowler Brook Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Coginchaug River Name of watershed or Hydrologic Unit Code (HUC): 01080205 Lower 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: November 18, 2009 and April 5, 2010 Field Determination. Date(s): |
| | CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION. |
| | re Areno "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew 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: |
| | CWA SECTION 404 DETERMINATION OF JURISDICTION. |
| The | re Areno "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): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands |
| | b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: acres. |
| | c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known): |

Non-regulated waters/wetlands (check if applicable):3

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Mandmade, predominantly vegetated (PEM1f) stormwater retention basin excavated out of uplands with an intermittent hydrological connection, via pipe to a Water of the U.S..

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

² 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).

3 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.

TNW 1.

Identify TNW: .

Summarize rationale supporting determination:

Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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 waterbody4 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.

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

(i) General Area Conditions: Watershed size: Pick List Pick List Drainage area: 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 TNW⁵: Tributary stream order, if known:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

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: 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discenting application of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting scour multiple observed or predicted flow events abrupt change in plant community |
| | | ☐ Discontinuous OHWM. ⁷ 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: Gil or scum line along shore objects Greshore Gresho |
| (iii) | Cha | emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ex |

⁶A 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.

⁷Ibid.

| | (iv) | Bio | logical 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. | Cha | ıract | teristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW |
| | (i) | | ysical Characteristics: General Wetland Characteristics: Properties: Wetland size: 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: PickList 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) | Cha | emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: httify specific pollutants, if known: |
| | (iii) | Bio | logical 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. | Cha | All | wetland(s) being considered in the cumulative analysis: Pick List proximately () 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) |
|--|-----------------|---------------------------------------|-----------------|
| italia: | | | |
| 7 T 1 | | 명, 개발 | |
| 1 Table 4 Table 1 Tabl | | · · · · · · · · · · · · · · · · · · · | |
| | | | |
| | | | |

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:

- Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 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. 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, acres. Wetlands adjacent to TNWs: acres. | | | |
| 2. | RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: | | | |

| | 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 ⁸ 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 jurisidictional. Data supporting this conclusion is provided at Section III.C. |
| | Provide acreage estimates for jurisdictional wetlands in the review area: |
| 6. | Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C. |
| | Provide estimates for jurisdictional wetlands in the review area: |
| 7. | Impoundments of jurisdictional waters. ⁹ As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below). |
| DE SU SU SU SU SU SU SU | DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 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: . |
| Ide | entify water body and summarize rationale supporting determination: |

E.

⁸See Footnote # 3.

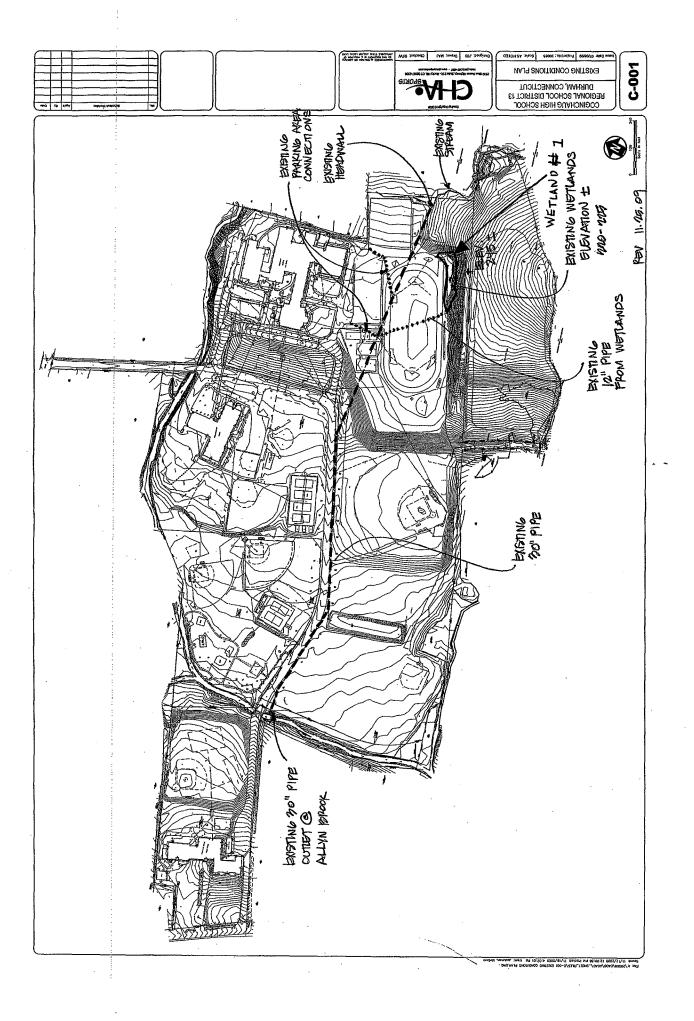
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

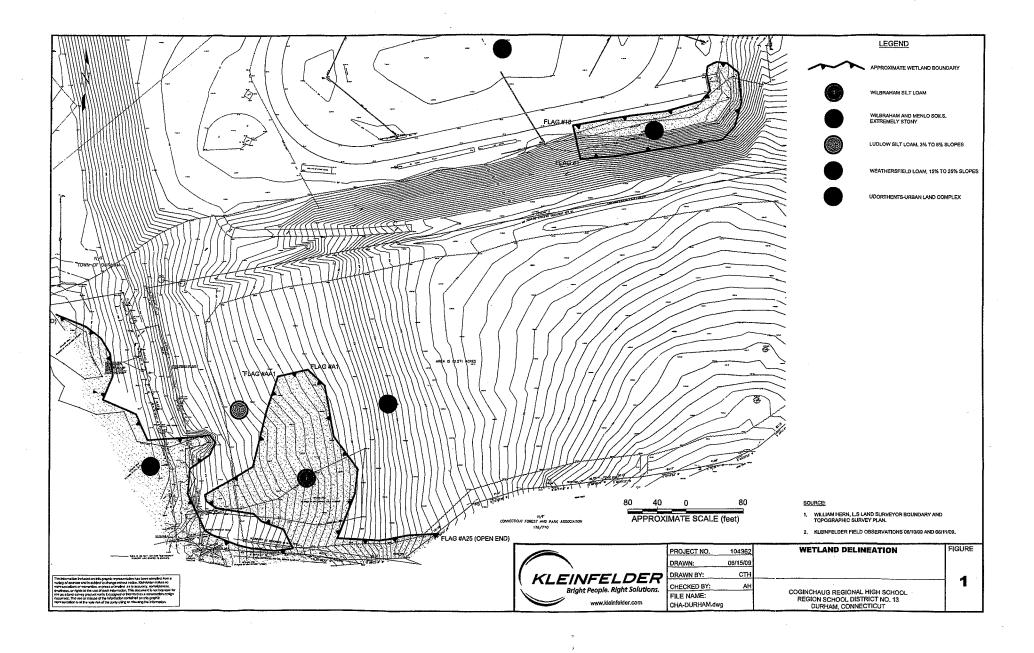
¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

| | | vide 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. | | N-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): Aquatic Resource (0.23 acre) is not a WOUS per 33 CFR 328.3. |
| | fact | wide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (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. |
| | | vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such adding 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. |
| SEC | TIC | ON IV: DATA SOURCES. |
| A. 1 | | PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:Durham Coginchaug HS, Kleinfelder 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: 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:Durham 1:24000. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Kleinfelder, Google Earth October 2006. |
| | | or ☑ Other (Name & Date):Kleinfelder June 2009. 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: There is another wetland (Wetland 2) and several tributaries outside of the review area for the subject of this jurisdiction. Wetland 2, which is located to the southwest of Wetland 1 is a palustrine forested broad-leaved deciduous semi-permanently flooded riverine wetland system associated with Fowler Brook, a tributary to the Coginchaug River. The documentation submitted in support of the request indicates that there are other waters and wetlands at the site along the western boundary

which are reported to flow during both the spring and winter seasons. Review of the USGS National Hydrography Database also identifies a seasonal flow pattern for these tributaries. The actual characteristic of the tributary has not been assessed in the field. Wetland 2 is identified as contiguous with this watercourse. It discharges to the west along the base of Strawberry Hill into Allyn Millpond, an impoundment of Allyn Brook, approximately 2000 linear feet downstream. Allyn Brook flows into the Coginchaug River just north of Wallingford Road which is associated with an extensive wetland area identified with Durham Meadows Hunting Area (another 3,000 linear feet downstream). The tributary which has a 39 square mile watershed flows north from Guilford, Connecticut into the Mattabesset in Middletown, Connecticut, and then ultimately to a confluence with the Connecticut River, a tidal tributary regulated under Section 10 of the Rivers and Harbors Act. There is another tributary that is conveyed from the northeast to the southwest across the school parcel within a 30 inch diameter culvert. The resources identified within this section have not been investigated for jurisdiction in this analysis.





C-201.3

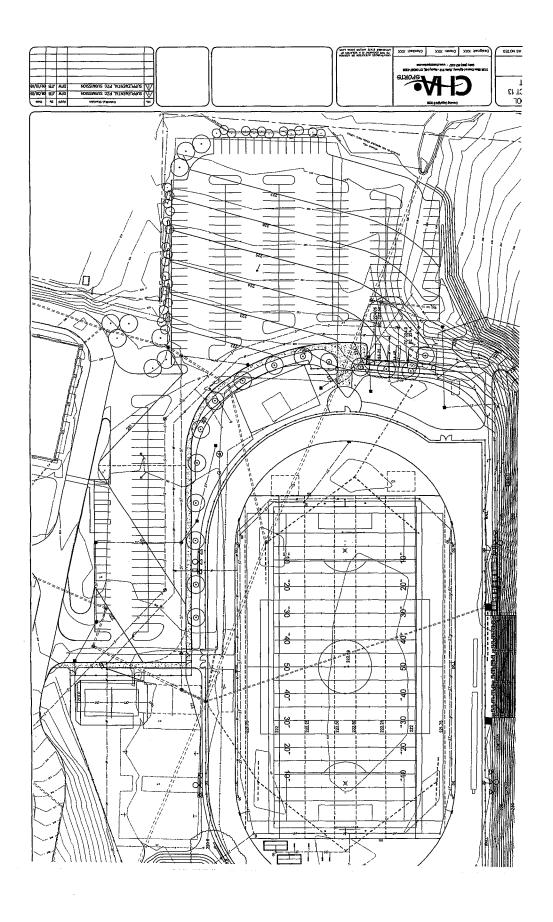
COGINCHAUG HIGH SCHOOL REGIONAL SCHOOL DISTRICT 13 DURHAM, CONNECTICUT

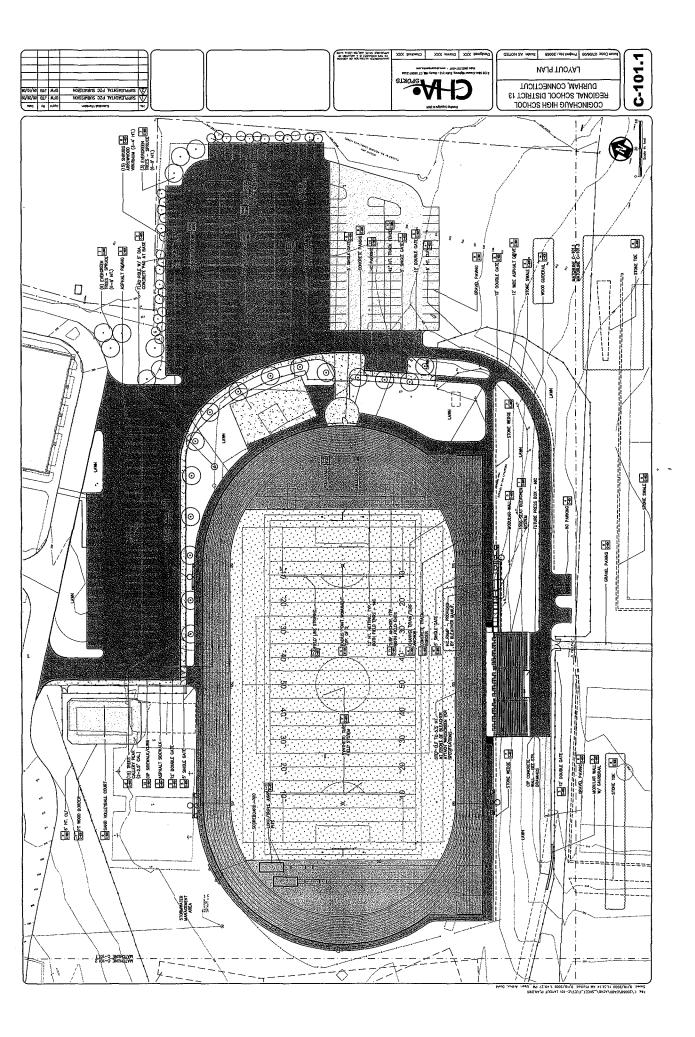
GRADING PLAN



| UNAUTHORISE ACTIVATION OR ADDITION |
|------------------------------------|
| TO THE COCUMENT IS A WOLATEN OF |
| APPLICABLE STATE AND/OR LOCAL LAND |
| |

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 20-May-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2007-02071-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: CT - Connecticut

County/parish/borough:FairfieldCity:GreenwichLat:41.00296Long:-73.63419

Universal Transverse Mercator Folder UTM List

UTM list determined by folder location

• NAD83 / UTM zone 18N

Waters UTM List

UTM list determined by waters location

• NAD83 / UTM zone 18N

Name of nearest waterbody: Long Island Sound
Name of nearest Traditional Navigable Water (TNW): Long Island Sound

Name of watershed or Hydrologic Unit Code (HUC):

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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 20-May-2010

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.

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: Long Island Sound supports interstate commerce and is subject to the ebb and flow of the tide.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area: 1

| Water Name | | Water Type(s) Present | | |
|------------|---------------|----------------------------------|--|--|
| | mooring field | TNWs, including territorial seas | | |

| b. Identify (estimate) size of waters of the U.S. in the review area |
|--|
|--|

Area: (m²) Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: []

OHWM Elevation: (if known

2. Non-regulated waters/wetlands:³

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

| TNW Name | Summarize rationale supporting determination: | |
|---------------|---|--|
| mooring field | Long Island Sound supports interstate commerce and is subject to the ebb and flow of the tide. Several marina facilities are located within the vicinity of the project site. | |

2. Wetland Adjacent to TNW

Not Applicable.

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

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

(i) General Area Conditions:

Watershed size: []
Drainage area: []
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [] tributaries before entering TNW.

:Number of tributaries

Project waters are [] river miles from TNW.

Project waters are [] river miles from RPW.

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

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

| Project waters cross or serve as state boundaries. |
|--|
| xplain: |
| dentify flow route to TNW: ⁵ |
| ributary Stream Order, if known: ot Applicable. |
|) General Tributary Characteristics: ributary is: pt Applicable. |
| ributary properties with respect to top of bank (estimate): ot Applicable. |
| rimary tributary substrate composition: ot Applicable. |
| ributary (conditions, stability, presence, geometry, gradient): ot Applicable. |
|) Flow: ot Applicable. |
| urface Flow is: ot Applicable. |
| ubsurface Flow: ot Applicable. |
| ributary has: ot Applicable. |
| factors other than the OHWM were used to determine lateral extent of CWA jurisdiction: |
| igh Tide Line indicated by: ot Applicable. |
| ean High Water Mark indicated by: ot Applicable. |
| i) Chemical Characteristics: haracterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc ot Applicable. |
| v) Biological Characteristics. Channel supports: ot Applicable. |
| Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW |
| Physical Characteristics:) General Wetland Characteristics: |

Properties:

| ORM Printer Friendly JD Form | |
|--|---|
| Not Applicable. | |
| (b) General Flow Relationship with Non-TNW: Flow is: Not Applicable. | |
| Surface flow is: Not Applicable. | |
| Subsurface flow: Not Applicable. | |
| (c) Wetland Adjacency Determination with Non Not Applicable. | -TNW: |
| (d) Proximity (Relationship) to TNW: Not Applicable. | |
| (ii) Chemical Characteristics: Characterize tributary (e.g., water color is clear Not Applicable. | r, discolored, oily film; water quality; general watershed characteristics, etc.). |
| (iii) Biological Characteristics. Wetland support Not Applicable. | rts: |
| 3. Characteristics of all wetlands adjacent to the All wetlands being considered in the cumulative Not Applicable. | |
| Summarize overall biological, chemical and ph Not Applicable. | nysical functions being performed: |
| C. SIGNIFICANT NEXUS DETERMINATI | ION |
| any wetlands adjacent to the tributary to dete TNW. For each of the following situations, a s has more than a speculative or insubstantial | flow characteristics and functions of the tributary itself and the functions performed learnine if they significantly affect the chemical, physical, and biological integrity of a significant nexus exists if the tributary, in combination with all of its adjacent wetlandefect on the chemical, physical and/or biological integrity of a TNW. Considerations ut 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.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

| Wetland Name | Туре | Size (Linear) (m) | Size (Area) (m ²) |
|---------------|----------------------------------|-------------------|-------------------------------|
| mooring field | TNWs, including territorial seas | - | 214483.368 |
| Total: | | 0 | 214483.368 |

| RM Printer Friendly JD Form |
|---|
| 2. RPWs that flow directly or indirectly into TNWs: Not Applicable. |
| Provide estimates for jurisdictional waters in the review area: Not Applicable. |
| 3. Non-RPWs that flow directly or indirectly into TNWs: ⁸ Not Applicable. |
| Provide estimates for jurisdictional waters in the review area: Not Applicable. |
| 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Not Applicable. |
| Provide acreage estimates for jurisdictional wetlands in the review area: Not Applicable. |
| 5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs: Not Applicable. |
| Provide acreage estimates for jurisdictional wetlands in the review area: Not Applicable. |
| 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs: Not Applicable. |
| Provide estimates for jurisdictional wetlands in the review area: Not Applicable. |
| 7. Impoundments of jurisdictional waters: ⁹ Not Applicable. |
| 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: ¹⁰ Not Applicable. |
| Identify water body and summarize rationale supporting determination: Not Applicable. |
| Provide estimates for jurisdictional waters in the review area: Not Applicable. |
| F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS 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: |

Rule" (MBR):

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

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

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird

Other (Explain):

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

Not Applicable.

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.

Not Applicable.

| SECTION IV: DATA SOURCES. | | | | |
|--|---------------------|---|--|--|
| A. SUPPORTING DATA. Data reviewed for JD (listed items shall be included in case file and, where checked and requested, appropriately reference below): | | | | |
| Data Reviewed Source Label Source Description | | | | |
| U.S. Geological Survey map(s). | Glenville Quadrange | - | | |

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

- 1-Boxes checked below shall be supported by completing the appropriate sections in Section III below.
- ²-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).
- ³-Supporting documentation is presented in Section III.F.
- ⁴-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- ⁵-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.
- ⁶-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.
- 7_{-Ibid}.
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- 10-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.

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.

| SEC A. | <u>CTION I: BACKGROUND INFORMATION</u> REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): <mark>July 19, 2010</mark> |
|-----------|---|
| B. | DISTRICT OFFICE, FILE NAME, AND NUMBER: NAE-2007-3401 PM: Cori M. Rose |
| C. | PROJECT LOCATION AND BACKGROUND INFORMATION: State: CT County/parish/borough: Fairfield City: New Canaan Center coordinates of site (lat/long in degree decimal format): Lat. 41.1779° N, Long73.48175° E. Universal Transverse Mercator: 18 Name of nearest waterbody: Silvermine River Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Norwalk River Name of watershed or Hydrologic Unit Code (HUC): 011000606 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, 2009 Field Determination. Date(s): |
| | CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION. |
| revi | waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: CWA SECTION 404 DETERMINATION OF JURISDICTION. |
| | re 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): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (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: 20 width (ft) and/or acres. Wetlands: 0.5 acres. |
| | c. Limits (boundaries) of jurisdiction based on: Established by OHWM. Elevation of established OHWM (if known): |
| | 2. Non-regulated waters/wetlands (check if applicable): ³ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional Explain: Explain: |

Boxes checked below shall be supported by completing the appropriate sections in Section III below.
 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
 Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

| 1. | TNW Identify TNW: |
|----|---|
| | Summarize rationale supporting determination: |
| 2. | Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent": |

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

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

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

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

If the waterbody⁴ 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. |
| | Thoutary nows unough Tex East inoutaines before entering 11.4. |
| | 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: |
| | 1 Toject waters cross of serve as state boundaries. Explain. |
| | Identify flow route to TNW ⁵ : |
| | · · · · · · · · · · · · · · · · · · · |
| | Tributary stream order, if known: |

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ 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: |
|-----|---|
| | ☐ 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ 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: |
| Cha | emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Lifty specific pollutants, if known: |

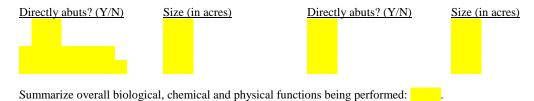
(iii)

⁶A 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.

⁷Ibid.

| | (iv) | | Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: . |
|----|------------|------|---|
| 2. | Cha | ract | eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW |
| | (i) | | Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: 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) | Cha | emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: |
| | (iii) | | logical 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: Simple of the problem |
| 3. | Cha | All | wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis. |

For each wetland, specify the following:



C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 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 Wetl | ands. | Check all that | apply | and provide size estimates in review area | : |
|----|-----------|-------------------|-------|-----------------|-------|---|---|
| | TNWs: | linear feet | | width (ft), Or, | | acres. | |
| | ■ Wetland | ls adjacent to TN | IWs: | 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 Silvermine River upstream of the Hickok Road Bridge has a drainage basin totalling 11.9 square miles. The envire Silvermine River watershed encompasses a watershed area of 57 square miles at its confluence with the tidal, navigable Norwalk River. USGS StreamStats estimates the flows of watercourses without gaging stations through the use of Regressional analysis. This analysis indicates that the river may have a 2-year flow of 553 ccfcs and a 25-year flow of 1480 cfs.

| | 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: 50 linear feet 20 width (ft). Other non-wetland waters: 0.50 acres. Identify type(s) of waters: |
| 3. | Non-RPWs ⁸ 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: See Section D.2. above for perennial rationale determination. In addition, the watercourse supports healthy populations of fish and shellfish which confirms it perennial nature. The wetlan dresources at the site consist of a riparian margin of bordering wetlands of relatively high density and diversity. Principle function and service of the aquatic resources at the site are fish and shellfish habitat, production export sediment/shoreline stabilization, and wildlife habitat. |
| | 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: 0.5 acres. |
| 5. | Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C. |
| | Provide acreage estimates for jurisdictional wetlands in the review area: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. 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). |
| DE | PLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 |

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

| | 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: |
| | 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: 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 <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres. |
| | Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. |
| SE | TION 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: WMC Consulting Engineers and Soil Sciences and Environmental Services Inc. 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: 1:24000 Norwalk. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: New Canaan 090010001B. 100-year Floodplain Elevation is: 257 (National Geodectic Vertical Datum of 1929) |
| | |

 $^{^{10}}$ 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 $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

| \boxtimes | Photographs: Aerial (Name & Date): Bing Microsof Maps Live cira 2008. |
|-------------|--|
| _ | or ⊠ Other (Name & Date):Submission by Soil Science and Environmental Serivices, Inc. July 2006. |
| | 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:

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

| SECTION I: BACKGROUND INFORMATION | | |
|---|--|--|
| A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 11-Aug-2010 | | |
| B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2007-02918-JD1 | | |
| C. PROJECT LOCATION AND BACKGROUND INFORMATION: | | |
| State : | CT - Connecticut | |
| County/parish/borough: | New Haven | |
| City: | Branford | |
| Lat: | 41.26883 | |
| Long: | -72.76996 | |
| Universal Transverse Mercator | Folder UTM List UTM list determined by folder location NAD83 / UTM zone 18N Waters UTM List UTM list determined by waters location | |
| | NAD83 / UTM zone 18N | |
| Name of nearest waterbody: | | |
| Name of nearest Traditional Navigable Water (TNW): | | |
| Name of watershed or Hydrologic Unit Code (HUC): | | |
| Check if map/diagram of review area and/or potential available upon request. | al jurisdictional areas is/are | |

| ass | Check if other sites (e.g., offs | site r e re | mitigation s corded on | sites, disposal sites, etc¿) are a different JD form. |
|-------|-------------------------------------|----------------|---------------------------|--|
| D. RE | VIEW PERFORMED FOR SITE EVALUATION: | | | |
| ~ | Office Determination Date: | 22- | Dec-2009 | |
| | 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.

- 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: Branford Harbor is a navigable water ofthe US - supports interstate commerce as well as a Federal Navigation Channel

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

- 1. Waters of the U.S.
- a. Indicate presence of waters of U.S. in review area:1

| Water Name | Water Type(s) Present |
|-----------------------------------|----------------------------------|
| Tilcon channel and basin dredging | TNWs, including territorial seas |

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

Area: (m²) Linear: (m)

c. Limits (boundaries) of jurisdiction:

| based on: OHWM Elevation: | [] (if known) | | | | |
|---|---|---|--|--|--|
| 2. Non-regulated waters/wetlands: ³ | | | | | |
| 5 5 | ctional waters and/or w etermined to be not juri | etlands were assessed within the sidictional. Explain: | | | |
| 2 | | ×. | | | |
| SECTION III: CWA A | ANALYSIS | | | | |
| A. TNWs AND WETLANDS | ADJACENT TO TNWs | | | | |
| N. | | , | | | |
| 1.TNW | | | | | |
| TNW Name | Summarize ra | tionale supporting determination: | | | |
| Tilcon channel and basin dredging | | ts interstate commerce as well as a nnel and is subject to ebb and flow | | | |
| 2. Wetland Adjacent to TNW Not Applicable. | | | | | |
| B. CHARACTERISTICS OF TR | RIBUTARY (THAT IS NOT A TNW) AND | D ITS ADJACENT WETLANDS (IF ANY): | | | |
| 1. Characteristics of non-TNW | Vs that flow directly or indirectly into | TNW | | | |
| (i) General Area Conditions: | | | | | |
| Watershed size: | [] | | | | |
| Drainage area: | [] | | | | |
| Average annual ra | Average annual rainfall: inches | | | | |
| Average annual sr | nowfall: inches | | | | |
| (ii) Physical Characteristics (a) Relationship with TNW: | | | | | |
| Tributary flows | directly into TNW | | | | |
| Tributary flows directly into TNW. Tributary flows through [] tributaries before entering TNW. | | | | | |
| :Number of tributar | | _ | | | |

| | ers are [] aerial (straight) miles from TN |
|--|--|
| Project water | ers are [] aerial(straight) miles from RP\ |
| Project v | vaters cross or serve as state boundarie |
| Explain: | valers gross of serve as state boundarie |
| | |
| Identify flow | route to TNW:⁵ |
| | |
| Tributary Stream Or | rdor if known: |
| Not Applicable. | uer, ii kilowii. |
| | |
| (b) General Tributar Tributary is: | y Characteristics: |
| Not Applicable. | |
| Tributary properties Not Applicable. | |
| Not Applicable. Primary tributary su | lbstrate composition: |
| Not Applicable. Primary tributary su Not Applicable. Tributary (condition | |
| Not Applicable. Primary tributary su Not Applicable. Tributary (condition Not Applicable. (c) Flow: | bstrate composition: |
| Not Applicable. Primary tributary su Not Applicable. Tributary (condition Not Applicable. (c) Flow: Not Applicable. | bstrate composition: |
| Not Applicable. Primary tributary su Not Applicable. | bstrate composition: |
| Not Applicable. Primary tributary su Not Applicable. Tributary (condition Not Applicable. (c) Flow: Not Applicable. Surface Flow is: | bstrate composition: |
| Not Applicable. Primary tributary su Not Applicable. Tributary (condition Not Applicable. (c) Flow: Not Applicable. Surface Flow is: | bstrate composition: |
| Not Applicable. Primary tributary su Not Applicable. Tributary (condition Not Applicable. (c) Flow: Not Applicable. Surface Flow is: Not Applicable. | bstrate composition: |

| Mean High Water Mark indicated by: Not Applicable. |
|--|
| (iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.). Not Applicable. |
| (iv) Biological Characteristics. Channel supports: Not Applicable. |
| 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW |
| (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Not Applicable. |
| (b) General Flow Relationship with Non-TNW: Flow is: Not Applicable. |
| Surface flow is: Not Applicable. |
| Subsurface flow: Not Applicable. |
| (c) Wetland Adjacency Determination with Non-TNW: Not Applicable. |
| (d) Proximity (Relationship) to TNW: Not Applicable. |
| (ii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.) Not Applicable. |
| (iii) Biological Characteristics. Wetland supports: Not Applicable. |
| 3. Characteristics of all wetlands adjacent to the tributary (if any): All wetlands being considered in the cumulative analysis: Not Applicable. |
| Summarize overall biological, chemical and physical functions being performed: Not Applicable. |

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.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

| Wetland Name | Туре | Size (Linear) (m) | Size (Area) (m²) |
|-----------------------------------|----------------------------------|-------------------|------------------|
| Tilcon channel and basin dredging | TNWs, including territorial seas | - | 83612.736 |
| Total: | | 0 | 83612.736 |

| 2. RPWs that flow directly or indirectly into TNWs: Not Applicable. | |
|--|------------------|
| Provide estimates for jurisdictional waters in the review area: Not Applicable. | |
| 3. Non-RPWs that flow directly or indirectly into TNWs: ⁸ Not Applicable. | |
| Provide estimates for jurisdictional waters in the review area: Not Applicable. | |
| 4. Wetlands directly abutting an RPW that flow directly or indire Not Applicable. | ectly into TNWs. |
| Provide acreage estimates for jurisdictional wetlands in the rev Not Applicable. | iew area: |

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

| Not Applicable. |
|--|
| Provide acreage estimates for jurisdictional wetlands in the review area: Not Applicable. |
| 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs: Not Applicable. |
| Provide estimates for jurisdictional wetlands in the review area: Not Applicable. |
| 7. Impoundments of jurisdictional waters: ⁹ Not Applicable. |
| 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: 10 Not Applicable. |
| Identify water body and summarize rationale supporting determination: Not Applicable. |
| Provide estimates for jurisdictional waters in the review area: Not Applicable. |
| F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS |
| 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 soley 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): |

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

Not Applicable.

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. Not Applicable.

SECTION IV: DATA SOURCES. A. SUPPORTING DATA. Data reviewed for JD (listed items shall be included in case file and, where checked and requested, appropriately reference below): Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

¹-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

³-Supporting documentation is presented in Section III.F.

²-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).

⁴-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally

and in the arid West.

5-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.

⁶-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. ⁷-lbid.

⁸⁻See Footnote #3.

⁹ -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰⁻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.