

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): August 3, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAC-RD-NE; SAC# 2016-00437 Haynes 1.5 Acre Tract

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: **Horry** City: **Murrells Inlet**
Center coordinates of site (lat/long in degree decimal format): Lat. **33.5858° N**, Long. **-79.0299° W**.
Universal Transverse Mercator:

Name of nearest waterbody: **Unnamed tributary of Collins Creek**

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

Name of watershed or Hydrologic Unit Code (HUC): **Waccamaw HUC: 03040206-10**

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

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

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

Office (Desk) Determination. Date:

Field Determination. Date(s): **May 20, 2016**

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

Waters subject to the ebb and flow of the tide.

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

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (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: **Wetland - 0.282** acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Pick List, Pick List

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: .

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: **Collins Creek.**

Summarize rationale supporting determination: **Collins Creek is subject to the ebb and flow of the tide.**

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: **55,599 acres** ; HUC **03040206-10**

Drainage area: **1,500 acres**

Average annual rainfall: **45 inches**

Average annual snowfall: **1.8 inches**

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **4** tributaries before entering TNW.

Project waters are **5-10** river miles from TNW.

Project waters are **1 (or less)** river miles from RPW.

Project waters are **2-5** aerial (straight) miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: **Project waters located entirely within the state of South**

Carolina.

Identify flow route to TNW⁵: **Unnamed Tributary 1 flows to Tributary 2 (unnamed) that flows to Tributary 3 (unnamed) which flows to Tributary 4 (unnamed) that flows to Tributary 5 (Collins Creek). Downstream from**

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.

the entry point of Tributary 4 to Tributary 5, Collins Creek becomes subject to the ebb and flow of the tide and was determined to be a TNW.

Tributary stream order, if known: 1.

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

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain: **Channel has been mechanically straightened according to Horry County Drainage Study of 1975, Sheet 11, labeled as L-5 Lateral Canal. Topographic maps depict the tributary as a blue line (i.e. tributary).**

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

Average width: 10 feet

Average depth: 5 feet

Average side slopes: 2:1.

Primary tributary substrate composition (check all that apply):

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

Other. Explain: **Silt and sand substrates are commonly associated with perennial tributaries such as this that are located in this low-gradient landscape and have urban/semi-urban drainage areas of this size (~1,500 acres). In these systems, flow is continuous but at a low velocity, allowing finer sediments to accumulate on the substrate.**

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Accessible areas of the reach of the tributary that were inspected revealed highly stable vegetated banks. In addition, a review of aerial photos for the inaccessible areas of the reach of the tributary revealed the same conclusion, vegetation along the banks which run through adjoining forested wetlands and forested uplands suggesting fairly stable banks.**

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

Tributary geometry: **Relatively straight.**

Tributary gradient (approximate average slope): <1 %

(c) Flow:

Tributary provides for: **Perennial flow**

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

Describe flow regime: **Perennial flow is defined to flow at least 90% of the year under normal climatic conditions. Tributary is typical of very low gradient perennial streams in the coastal plain (i.e. continuous, low velocity flow). The tributary begins within a residential subdivision situated between U.S. Highway 17 By-Pass and U.S. Highway 17 Business and continues approximately 1.87 miles until it joins another unnamed tributary located to the west. This tributary was also previously determined to have perennial flow under SAC# 2005-00575, issued on June 29, 2010.**

Other information on duration and volume:

Surface flow is: **Discrete and confined.** Characteristics: **Flows within channelized bed and banks of tributary under normal climatic conditions.**

Subsurface flow: **Unknown.** Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

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

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.

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

(iii) **Chemical Characteristics:**

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

Explain: **Land use in the drainage area is largely urban development with some forestland. Tributary headwaters are just east of U.S. Highway 17 By-Pass, in an urban drainage area; runoff associated with urban development is likely to enter the tributary and a continuous, active flow was observed through the stormwater system between the subject site and the tributary.**

Identify specific pollutants, if known: **Runoff from streets located in highly developed areas have the potential to pollute the water within the watershed. Runoff can carry oil, rubber, heavy metals, pesticides, and other contaminants. Untreated or poorly treated sewage can be low in dissolved oxygen and high in pollutants such as fecal coliform bacteria, nitrates, phosphorus, chemicals, and other bacteria. Groundwater and surface water can be contaminated from many sources such as garbage dumps, toxic waste and chemical storage and use areas, leaking fuel storage tanks, and intentional dumping of hazardous substances.**

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

Riparian corridor. Characteristics (type, average width): **Tributary flows through a forested area that aerial photos indicate includes wetlands. Both the upland and wetland forest areas shade and buffer the tributary and provide filtering of runoff before it enters the tributary.**

Wetland fringe. Characteristics: **See above statement.**

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: **Evidence of foraging, nesting, and travel corridors as well as minnows, tadpoles, and small macrofauna were observed in the tributary.**

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: **0.282** acres

Wetland type. Explain: **Palustrine Forested.**

Wetland quality. Explain: **Fully functional.**

Project wetlands cross or serve as state boundaries. Explain: **Project wetlands are located entirely within the state of South Carolina.**

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow.** Explain: **Flow from the wetland to the tributary is via culvert under Tournament Blvd. Based on the site visit conducted on May 20, 2016, the onsite wetland abuts the culvert which connects directly to the tributary. Water flows out of the wetland through the culvert during the wetter months of the year and during major rainfall events.**

Surface flow is: **Discrete and confined**

Characteristics: **Flow from the wetland to the tributary is through a concrete culvert under Tournament Blvd.**

Subsurface flow: **Unknown.** Explain findings: .

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: **Flow from the wetland to the tributary is through a concrete culvert under Tournament Blvd.**

Ecological connection. Explain: .

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **2-5** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **100 - 500-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: **Wetlands were saturated to the surface at the time of the site visit on May 20, 2016. General watershed characteristics consist of developed urban areas adjacent to the site with undeveloped forested areas located downstream within the relevant reach of the tributary. Urban development is continuing in this area, resulting in fewer and more fragmented wetlands and altered, more rapid runoff following rain events.**

Identify specific pollutants, if known: **It is reasonable to expect trash from residential developments and U.S. Highway 17 By-Pass, as well as pollutants carried by stormwater runoff from the adjacent highway and adjacent residential lots to enter the onsite wetland.**

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

Riparian buffer. Characteristics (type, average width): **While the wetland is not truly riparian, it does act as a buffer to the adjacent stormwater system which is a direct conduit to the downstream RPW and TNW. The onsite wetland retains and filters runoff before it enters the adjacent tributary.**

Vegetation type/percent cover. Explain: **Dominant vegetation is FAC and FACW.**

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: **This wetland system enhances wildlife diversity through timber type changes and the transition between upland and aquatic systems.**

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

All wetland(s) being considered in the cumulative analysis: **7**

Approximately (**205**) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
N	0.282	N	12
N	28	Y	71
N	5	Y	12
N	77		

Summarize overall biological, chemical and physical functions being performed: **The similarly situated wetlands contribute vital biological, chemical, and physical functions to the downstream TNW. This wetland system enhances wildlife diversity, acts as catch basins filtering sediment and pollutants from surrounding urban development and silvicultural practices and supports the downstream food web, and provides nutrient fixation, flood attenuation and flow maintenance functions. See III.C.3. below for more details.**

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

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

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: **The tributary was determined to be an RPW with perennial flow by review of aerial photos, topographic maps, Horry County Soil Survey, Horry County Drainage Canal Study of 1975, and evidence accumulated during the site visit. Aerial photos show the signature of a defined channel discharging into a natural tributary. Topographic maps depict the feature as a solid blue line which represents a tributary with perennial flow. Horry County Drainage Canal Study depicts a Lateral drainage canal (L-5) which is designed and maintained as a channel with a 5' depth, 13' top width and 3' bottom width, altered from its natural state to adequately convey flow from its drainage area to the downstream tributary; the drainage area of this feature has also undergone substantial development and the construction of stormwater systems since the 1975 drainage study, which has resulted in increased impervious surface, strongly supporting the conclusion that the discharges through the tributary have increased. Horry County Soil Survey depicts a symbol that represents a tributary with intermittent flow (experience has shown that the Horry County soil survey routinely underestimates the flow regime of perennial RPWs). During the site visit, substantial flow was observed in the canal leading from the onsite wetland system. Field experience in Horry County has also shown that drainage areas of this size (1500 acres) routinely support perennial flow, particularly if there are significant wetland areas associated with them providing flow maintenance functions. After reviewing all available information, the tributary and all similarly situated wetlands were determined to have a significant nexus with the downstream TNW (Collins Creek).**

Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs:

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: **The tributary was determined to be an RPW with perennial flow by review of aerial photos, topographic maps, Horry County Soil Survey, Horry County Drainage Canal Study of 1975, and evidence accumulated during the site visit. Aerial photos show the signature of a defined channel discharging into a natural tributary. Topographic maps depict the feature as a solid blue line which represents a tributary with perennial flow. Horry County Drainage Canal Study depicts a Lateral drainage canal (L-5) which is designed and maintained as a channel with a 5' depth, 13' top width and 3' bottom width, altered from its natural state to adequately convey flow from its drainage area to the downstream tributary; the drainage area of this feature has also undergone substantial development and the construction of stormwater systems since the 1975 drainage study, which has resulted in increased impervious surface, strongly supporting the conclusion that the discharges through the tributary have increased. During the field inspection, substantial flow was observed in the RPW at the accessible location within the reach. Although the entire reach was not accessible, field experience in Horry County has shown that drainage areas of this size (1500 acres) routinely support perennial flow, particularly if there are significant wetland areas associated with them providing flow maintenance functions. After reviewing all available information, the tributary was determined to be an RPW with perennial flow. In addition, the tributary was previously determined to have perennial flow under SAC# 2005-00575, issued on June 29, 2010 .**
 - 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-RPWs⁸ that flow directly or indirectly into TNWs.

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

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

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

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

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

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

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

Provide acreage estimates for jurisdictional wetlands in the review area: **0.282** 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.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).

Explain:

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

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: .
 Wetlands: acres.

⁸See Footnote # 3.

⁹To 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.

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

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

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

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

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

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Survey plat prepared by Culler Land Surveying III, Inc., dated June 2, 2016 and entitled "WETLAND SURVEY / FOR / TRACT 2, AT THE INTERSECTION OF McDOWELL / SHORTCUT ROAD AND TOURNAMENT BLVD., / SOCASTEE TOWNSHIP, / HORRY COUNTY, SOUTH CAROLINA / PREPARED FOR / RACHELLE AND BARRY HAYNES"**.
- 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: **Brookgreen, depicts forested uplands onsite. The offsite tributary is depicted as a blue line.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **p. 92, Echaw (non-hydric).**
- National wetlands inventory map(s). Cite name: **PFO1B (Palustrine, Forested wetland).**
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **99-11222:124, SCDNR 2006, Google Earth 2015.**
or Other (Name & Date): **Photos taken during site visit dated May 20, 2016.**
- Previous determination(s). File no. and date of response letter: **SAC# 2005-00575, issued on June 29, 2010.**
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: This form assesses a 1,504 acre site consisting of 0.282 acre of jurisdictional freshwater wetlands. As described above, the onsite wetland flows through a culvert under Tournament Blvd. and into an offsite unnamed tributary (perennial RPW) which flows through 4 tributaries before reaching the downstream TNW (Collins Creek). It was determined that the tributary, in conjunction with all similarly situated wetlands have a significant nexus with the downstream TNW.