

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): February 22, 2018

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: CESAC-RD-NE, JD Form 1 of 1; SAC-2017-01925 GMK Associates / Lake City Hospital Brown Site

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: **Williamsburg County** City:
Center coordinates of site (lat/long in degree decimal format): Lat. **33.758137° N**, Long. **-79.807566° W**.
Universal Transverse Mercator:

Name of nearest waterbody: **Unnamed tributary of Kingstree Swamp Canal**

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

Name of watershed or Hydrologic Unit Code (HUC): **03040205-07**

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): **January 24, 2018**

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: **1,225** linear feet: width (ft) and/or acres.

Wetlands: **5.07 a. (Jurisdictional Wetland A) + 0.96 a. (Jurisdictional Wetland B) = 6.03** acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Established by OHWM., 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: **A linear feature was observed within the project boundary and determined to be a non-jurisdictional ditch.**

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.

This linear feature is located near the southeastern property boundary and continues east toward US Highway 52. This feature is not depicted on the topographic map. Although water was observed within this feature, no OHWM was observed. The feature had leaf litter and debris present. This non-jurisdictional ditch continues east off-site where it flows into a roadside drainage ditch west of and adjacent to US Highway 52, which flows north into the unnamed tributary of Kingstree Swamp Canal, a perennial RPW.

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: **Black River.**

Summarize rationale supporting determination: **According to the USACE Navigability Study Report No. 06, the Black River's recommended limit of navigability is located at River Mile (RM) 107.7. The project waters enter the Black River at RM 88, which is located downstream of the recommended limit of navigability.**

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: **209,661 acres** ; HUC **03040205-07**

Drainage area: **960 acres**

Average annual rainfall: **50 inches**

Average annual snowfall: **1 inches**

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **2** tributaries before entering TNW.

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

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

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

Project waters are **5-10** 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: N/A.

Identify flow route to TNW⁵: **The unnamed tributary of Kingstree Swamp Canal flows west into Kingstree Swamp Canal, a pRPW. Kingstree Swamp Canal flows south into the Black River, a TNW.**
Tributary stream order, if known: **The on-site tributary is a 1st order stream.**

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

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: **This tributary appears to have been straightened.**

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

Average width: **6-8** feet
Average depth: **2-4** feet
Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: This tributary is relatively stable with no erosion or sloughing banks.

Presence of run/riffle/pool complexes. Explain: **No run/riffle/pool complexes.**

Tributary geometry: **Relatively straight.**

Tributary gradient (approximate average slope): **0-1** %

(c) Flow:

Tributary provides for: **Perennial flow**

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

Describe flow regime: **Based on a review of the aerials and topographic map, this tributary provides year-round flow. This tributary originates east of the project site and flows west into Kingstree Swamp Canal.**

Other information on duration and volume: **In addition to being recharged by groundwater, this tributary receives overland sheetflow from abutting wetlands and discrete and confined flow from the non-jurisdictional ditch.**

Surface flow is: **Discrete and confined.** Characteristics: **The surface flow of this tributary is confined within bed and banks.**

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):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;

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.

⁷Ibid.

- physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) Chemical Characteristics:

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

Explain: **The unnamed tributary of Kingtree Swamp Canal is typical of a blackwater system with clear, flowing water present. Land use in this watershed is comprised of 34% forested wetland, 32% forested land, 26% agricultural land, and 6% urban land. The remaining land uses consist of nonforested wetland, water and barren land. The SCDHEC Watershed Assessment states that there is a low to moderate potential for growth in this watershed, which contains the Towns of Kingtree and Lane and a portion of the Town of Greeleyville.**

Identify specific pollutants, if known: **Because a large portion of the watershed is comprised of silvicultural and agricultural land uses, the potential exists for herbicides and other pollutants, as well as runoff from land disturbing activities such as plowing and harvesting, to enter the tributary. Because these land uses require regular manipulation of the soils, silvicultural and agricultural activities can create an increase in suspended sediments in the downstream tributaries. According to the SCDHEC Watershed Assessment, the downstream monitoring station on Kingtree Swamp Canal (PD-358) states that aquatic life uses and recreational uses are fully supported and that there is a significant decreasing trend in pH. Although dissolved oxygen excursions occurred, they are typical of values seen in blackwater systems and are considered natural, not standard violations. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter.**

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

- Riparian corridor. Characteristics (type, average width): **This tributary supports a riparian zone approximately 200 linear feet wide that contributes to the health of the aquatic system by filtering out pollutants and preventing erosion.**
- Wetland fringe. Characteristics: **This 1st order tributary is located within a wetland system.**
- Habitat for:
 - Federally Listed species. Explain findings: .
 - Fish/spawn areas. Explain findings: .
 - Other environmentally-sensitive species. Explain findings: .
 - Aquatic/wildlife diversity. Explain findings: **This tributary and the adjacent wetlands provide important aquatic habitat for wildlife and a travel corridor for aquatic fauna.**

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: **0.96 (Jurisdictional Wetland B)** acres

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

Wetland quality. Explain: **This wetland was determined to be fully functional. Although a non-jurisdictional ditch is located adjacent to this wetland, it does not substantially alter important functions of this wetland.**

Project wetlands cross or serve as state boundaries. Explain: **N/A.**

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: **The non-abutting jurisdictional wetland in the review area flows into the downstream tributary during and after major storm events.**

Surface flow is: **Discrete and confined**

Characteristics: **This wetland flows into the unnamed tributary of Kingtree Swamp Canal via a non-jurisdictional ditch.**

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: **The Jurisdictional Wetland B has a direct hydrological connection to the unnamed tributary of Kingtree Swamp Canal via a non-jurisdictional ditch.**

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 **5-10** 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: **Clear water, typical of a blackwater system, was present on the surface of Jurisdictional Wetland B. Land use in this watershed is comprised of 34% forested wetland, 32% forested land, 26% agricultural land, and 6% urban land. The remaining land uses consist of nonforested wetland, water and barren land. The SCDHEC Watershed Assessment states that there is a low to moderate potential for growth in this watershed, which contains the Towns of Kingtree and Lane and a portion of the Town of Greeleyville.**

Identify specific pollutants, if known: **Because a large portion of the watershed is comprised of silvicultural and agricultural land uses, the potential exists for herbicides and other pollutants, as well as runoff from land disturbing activities such as plowing and harvesting, to enter the tributary. Because these land uses require regular manipulation of the soils, silvicultural and agricultural activities can create an increase in suspended sediments in the downstream tributaries. According to the SCDHEC Watershed Assessment, the downstream monitoring station on Kingtree Swamp Canal (PD-358) states that aquatic life uses and recreational uses are fully supported and that there is a significant decreasing trend in pH. Although dissolved oxygen excursions occurred, they are typical of values seen in blackwater systems and are considered natural, not standard violations. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter..**

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: **This wetland is providing important aquatic habitat and wildlife diversity in an area surrounded by development.**

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

All wetland(s) being considered in the cumulative analysis: **4**
 Approximately (**594.03**) 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	0.96	Y	5.07
		Y	28
		Y	560

Summarize overall biological, chemical and physical functions being performed: **The onsite 1st order tributary and its adjacent wetlands are providing important biological, chemical, and physical functions. According to the SCDHEC Watershed Assessment, this watershed is comprised of 34% forested wetland, 32% forested land, 26% agricultural land, and 6% urban land. Due to the predominance of silvicultural and agricultural land uses in the watershed, herbicides and other pesticides as well as sediment from soil manipulation activities are likely to enter the tributary and downstream TNW. This tributary, together with its adjacent wetlands, act as a catch basin to help filter out pollutants from the neighboring uplands and to hold runoff prior to it flowing downstream into the TNW. The Jurisdictional Wetlands A and B, in conjunction with the other off-site wetlands, and the perennial RPW, collectively have a significant nexus to the downstream Black River .**

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 and the adjacent wetlands are collectively performing important biological, chemical, and physical functions within a watershed largely comprised of silvicultural and agricultural land uses. The biological functions being performed include providing breeding grounds and shelter for aquatic animals and diversifying the plant life within the watershed. As a result, these wetlands supply food sources for a variety of wetland dependent species, such as invertebrates, amphibians, reptiles, and mammals. These wetlands and tributary are essential in providing organic carbons in the form of their collective primary productivity to downstream waters, resulting in the nourishment of the downstream food web. The chemical functions being performed consist of the removal of excess pollutants, which are contributed by runoff from the surrounding uplands, from the downstream TNW. This reduces nitrogen and phosphorus loading downstream and effectively prevents oxygen depletion that can result from eutrophication. Physically, the adjacent wetlands help reduce stormwater flow, and the landscape position of these wetlands and their vegetation prevent soil from eroding and traveling downstream. Not only does this prevent the accumulation of sediment downstream, which can smother fish and other aquatic wildlife, but it also reduces the amount of pollutants downstream because these pollutants are usually transported by sediment particles. These wetlands temporarily store flood waters and reduce downstream peak flows by retaining large amounts of water within the soil and through evapo-transpiration. This helps to maintain seasonal flow volumes. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of the Black River, it has been determined that there is a significant nexus between the relevant reach of the tributary and adjacent wetlands to the downstream TNW.**

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 onsite tributary located along the northern boundary of the site was determined to have perennial flow based on a review of the aerials, topographic map, soil survey, NWIs, and information obtained during the site visit. The aerials depict this tributary as a shaded linear feature and the topo map depicts it as a solid blue line. The soil survey maps this tributary as Coxville, which is a hydric soil. The NWIs map this tributary as palustrine wetlands (PFO1Bd). During the site visit, flowing water and an OHWM were observed within this tributary. This tributary continues west and flows into a perennial RPW named Kingtree Swamp Canal. Kingtree Swamp Canal flows south into the Black River, a TNW.**
 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: **1,225** linear feet **6-8** 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: **Jurisdictional Wetland A was determined to directly abut the onsite tributary located near the northern property boundary based on a review of the aeriels, topographic map, soil survey and NWIs. The aeriels and topographic map depict this wetland as a portion of a larger wetland system that directly abuts the on site tributary. The NWIs map this wetland as Palustrine forested (PFO1Bd) and the soil survey maps this wetland system as Coxville, a hydric soil..**
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **5.07 a. (Jurisdictional Wetland A)** 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: **0.96 a. (Jurisdictional Wetland B)** 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: .

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.

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): **A linear feature was observed within the project area and determined to be a non-jurisdictional ditch.**

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: **Report and sketch by Terracon Consultants, 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: **Report No. 06.**
- 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: **Lake City West; The topographic map depicts the on site wetlands as forested and the remainder of the site is depicted as cleared uplands. The onsite tributary is depicted as a solid blue line that intersects the northern portion of the site and continues west.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **Pgs. 16 and 7; The majority of the site, including the uplands and Jurisdictional Wetland B, are mapped Goldsboro, Noboco, and Lynchburg, which are partially hydric soils. Jurisdictional Wetland A and the on site tributary are mapped Coxville, a hydric soil.**
- National wetlands inventory map(s). Cite name: **U21 and PFO1Bd; The majority of the site is mapped uplands (U21). Jurisdictional Wetland A and the on site tributary are mapped palustrine forested wetlands (PFO1Bd).**
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **SC DNR 2006, 99:11227:183; The aerials depict this site as cleared uplands and forested wetlands.**
 - or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Jurisdictional Wetland A was determined to directly abut the onsite tributary located near the northern property boundary based on a review of the aeriels, topographic map, soil survey and NWIs. The aeriels and topographic map depict this wetland as a portion of a larger wetland system that directly abuts the on site tributary. The NWIs map this wetland as Palustrine forested (PFO1Bd) and the soil survey maps this wetland system as Coxville, a hydric soil. The non-abutting wetland, Jurisdictional Wetland B, was determined to have a significant nexus to the downstream TNW in Section IIIC above.

The onsite tributary located along the northern boundary of the site was determined to have perennial flow based on a review of the aeriels, topographic map, soil survey, NWIs, and information obtained during the site visit. The aeriels depict this tributary as a shaded linear feature and the topo map depicts it as a solid blue line. The soil survey maps this tributary as Coxville, which is a hydric soil. The NWIs map this tributary as palustrine wetlands (PFO1Bd). During the site visit, flowing water and an OHWM were observed within this tributary. This tributary continues west and flows into a perennial RPW named Kingtree Swamp Canal. Kingtree Swamp Canal flows south into the Black River, a TNW.

Additionally, a linear feature was observed within the project boundary and determined to be a non-jurisdictional ditch. This linear feature is located near the southeastern property boundary and continues east toward US Highway 52. This feature is not depicted on the topographic map. Although water was observed within this feature, no OHWM was observed. The feature had leaf litter and debris present. This non-jurisdictional ditch continues east off-site where it flows into a roadside drainage ditch west of and adjacent to US Highway 52, which flows north into the unnamed tributary of Kingtree Swamp Canal, a perennial RPW. .