

**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):** March 14, 2023

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** JD Form 1 of 2; SAC-2022-00586 Charles Graham Tract

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

State: South Carolina County/parish/borough: Horry County City:  
Center coordinates of site (lat/long in degree decimal format): Lat. 34.0203°, Long. -78.7447°.  
Universal Transverse Mercator:

Name of nearest waterbody: Camp Swamp

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: The aquatic resources documented on this form were determined to be isolated and do not flow into a TNW.

Name of watershed or Hydrologic Unit Code (HUC): HUC 03040206-0703

☒ 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: October 27, 2022

☐ Field Determination. Date(s):

**SECTION II: SUMMARY OF FINDINGS**

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

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

☐ Waters subject to the ebb and flow of the tide.

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

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

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

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

- ☐ TNWs, including territorial seas
- ☐ Wetlands adjacent to TNWs
- ☐ Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
- ☐ Non-RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- ☐ Impoundments of jurisdictional waters
- ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: linear feet: width (ft) and/or acres.  
Wetlands: acres.

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

Elevation of established OHWM (if known): .

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

- ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.  
Explain: **Four potentially jurisdictional wetlands, totaling 0.64 acre, are located within the project area. These four depressional wetlands are depicted as forested uplands on the topographic map. The topographic map does not depict any blue lines adjacent to these four wetlands. The soil survey maps the area surrounding these wetlands as Meggett, a hydric soil. The NWIs map these wetlands as palustrine forested wetlands (PFO1/4A and PFO1B). These four**

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

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

<sup>3</sup> Supporting documentation is presented in Section III.F.

wetlands are depressional wetlands with no discernible outfall. Based on information submitted by the agent, the four onsite non-jurisdictional wetlands were determined to be surrounded by non-hydric soils and have no connection to any other potential WOUS. Therefore, based on the review of the information provided by the agent in the submittal dated April 7, 2022, as well as aerials, topographic maps, soil survey, and NWIs, Non-jurisdictional Wetlands #1, #2, #3, and #4 were determined to be isolated and non-jurisdictional.

These depressional wetlands exhibited hydric soils, hydrophytic vegetation, and indicators of hydrology, which satisfies the criteria set forth in the 1987 Wetland Delineation Manual and the Atlantic and Gulf Coastal Plain Regional Supplement. All water located within or draining toward these wetlands has no connection to any WOUS. Additionally, these wetlands are completely surrounded by uplands, which further disrupts any possible connection to any WOUS. Because of the lack of discernible outfall, topography grades and lack of evidence of chemical, physical, or biological connection, these four wetlands were determined to be isolated, non-jurisdictional.

### **SECTION III: CWA ANALYSIS**

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

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

**1. TNW**

Identify TNW: .

Summarize rationale supporting determination: .

**2. Wetland adjacent to TNW**

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

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

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

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

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

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

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

**(i) General Area Conditions:**

Watershed size: **Pick List**

Drainage area: **Pick List**

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

☐ Tributary flows directly into TNW.

☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

Project waters are **Pick List** river miles from RPW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Project waters are **Pick List** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

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

Tributary stream order, if known: .

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

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

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

**Tributary is:** ☐ Natural  
☐ Artificial (man-made). Explain: .  
☐ 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):**

|  |  |                                   |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts             | <input type="checkbox"/> Sands                     | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles           | <input type="checkbox"/> Gravel                    | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock           | <input type="checkbox"/> Vegetation. Type/% cover: |                                   |
| <input type="checkbox"/> 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):**

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

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

|  |  |
|--|--|
| <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:** .

**Identify specific pollutants, if known:** .

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

<sup>7</sup>Ibid.

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

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

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: . acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

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

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain: .

☐ Ecological connection. Explain: .

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

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

Identify specific pollutants, if known: .

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

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

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

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

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

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

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

### C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

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

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

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

- ☐ TNWs: linear feet width (ft), Or, 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<sup>8</sup> that flow directly or indirectly into TNWs.**

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

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

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

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

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

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

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

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

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

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

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

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

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

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- ☐ Demonstrate that impoundment was created from “waters of the U.S.,” or  
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

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

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

**Identify water body and summarize rationale supporting determination:** .

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

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

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

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

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

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

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

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

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☒ Wetlands: 0.64 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 Southern Palmetto Environmental.
- ☒ 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: USGS Topographic Map / 7.5 Minute Index / Fireway Quad.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Soil Survey Geographic Database (SSURGO) Map Service created on March 31, 2021, and updated on April 26, 2021.
- ☒ National wetlands inventory map(s). Cite name: Wetlands Raster REST Map dated March 30, 2021, and updated on May 19, 2021.
- ☐ State/Local wetland inventory map(s): .
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Google Earth aerials dated January 23, 2021, and April 12, 2016.
  - or ☒ Other (Name & Date): Site photographs submitted by the agent dated March 31, 2022.
- ☐ 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:** Four potentially jurisdictional wetlands, totaling 0.64 acre, are located within the project area. These four depressional wetlands are depicted as forested uplands on the topographic map. The topographic map does not

depict any blue lines adjacent to these four wetlands. The soil survey maps the area surrounding these wetlands as Meggett, a hydric soil. The NWIs map these wetlands as palustrine forested wetlands (PFO1/4A and PFO1B). These four wetlands are depressional wetlands with no discernible outfall. Based on information submitted by the agent, the four onsite non-jurisdictional wetlands were determined to be surrounded by non-hydric soils and have no connection to any other potential WOUS. Therefore, based on the review of the information provided by the agent in the submittal dated April 7, 2022, as well as aerials, topographic maps, soil survey, and NWIs, Non-jurisdictional Wetlands #1, #2, #3, and #4 were determined to be isolated and non-jurisdictional.

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**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** JD Form 2 of 2; SAC-2022-00586 Charles Graham Tract

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

State: South Carolina County/parish/borough: Horry County City:  
Center coordinates of site (lat/long in degree decimal format): Lat. 34.0203°, Long. -78.7447°.  
Universal Transverse Mercator:

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03040206-0703

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

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

☐ Waters subject to the ebb and flow of the tide.

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

Explain: .

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

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

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

- ☐ TNWs, including territorial seas
- ☐ Wetlands adjacent to TNWs
- ☐ Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
- ☐ Non-RPWs that flow directly or indirectly into TNWs
- ☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- ☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- ☐ Impoundments of jurisdictional waters
- ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: 1.45 a. (JD Wetland #1) + 0.36 a. (JD Wetland #2) + 0.25 a. (JD Wetland #3) + 1.80 a. (JD Wetland #4) + 0.15 a. (JD Wetland #5) + 0.12 a. (JD Wetland #6) = 4.13 acres.

**c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual**

Elevation of established OHWM (if known): .

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

- ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **A non-jurisdictional ditch is located within the review area. This feature is depicted as a blue line on the topographic map and as a linear feature on the NHD. The soil survey maps this feature and the upstream wetland as Ogeechee loamy fine sand, which is a hydric soil. Within the project boundaries, this feature is located within agricultural fields and is relatively straight. Although this feature drains an upstream wetland, this feature is located**

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

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

<sup>3</sup> Supporting documentation is presented in Section III.F.

within uplands on site and was determined to be non-jurisdictional. Two other linear features are also located on site, and these features are not depicted on the NHD, topographic map, nor NWIs. These two features were determined to have been excavated out of uplands and therefore are non-jurisdictional. Additionally, a non-jurisdictional pond is located near the southern property corner. This pond is mapped as being surrounded by uplands on the topographic map and aerials, and the pond is depicted as uplands on the NWIs. Therefore, this pond was determined to be non-jurisdictional.

### **SECTION III: CWA ANALYSIS**

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

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

##### **1. TNW**

Identify TNW: .

Summarize rationale supporting determination: .

##### **2. Wetland adjacent to TNW**

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

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

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

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

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

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

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

###### **(i) General Area Conditions:**

Watershed size: 96,578.36 acres; HUC: 03040206-07

Drainage area: 9,136.3 acres

Average annual rainfall: 51.6 inches

Average annual snowfall: 0.9 inches

###### **(ii) Physical Characteristics:**

###### **(a) Relationship with TNW:**

☐ Tributary flows directly into TNW.

☒ Tributary flows through 1 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

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

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<sup>4</sup> 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: Yes; Camp Branch originates in North Carolina.

Identify flow route to TNW<sup>5</sup>: Camp Branch, a perennial RPW, flows into Buck Swamp, a perennial RPW, which flows into the Waccamaw River, a TNW.

Tributary stream order, if known: At this location, Camp Branch is a 3<sup>rd</sup> order stream.

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

**Tributary is:** ☐ Natural  
☐ Artificial (man-made). Explain: .  
☒ Manipulated (man-altered). Explain: The downstream portion of Camp Branch has been channelized.

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

Average width: 10-15 feet

Average depth: 6-8 feet

Average side slopes: Vertical (1:1 or less).

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

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The 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): 1 %

(c) Flow:

Tributary provides for: Perennial Flow

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

Describe flow regime: According to the NHD and the topographic maps, this tributary is a 3<sup>rd</sup> order stream. The NHD and topographic maps depict this tributary as a solid blue line named Camp Branch.

Other information on duration and volume: This tributary is recharged by groundwater and also receives overland sheetflow from abutting wetlands and discrete and confined flow from upstream wetlands connected by linear features.

Surface flow is: Discrete and confined. Characteristics: Under normal circumstances, surface flow is restricted to the bed and banks of the tributary.

Subsurface flow: Unknown. Explain findings: .

☐ Dye (or other) test performed: .

Tributary has (check all that apply):

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

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

☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:

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

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

<sup>7</sup> Ibid.

- |  |  |
|--|--|
| <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: This 3<sup>rd</sup> order stream has clear flowing water. No oily film or discoloration is present. Land use in this watershed is comprised of 45.14% forested wetland, 22.58% agricultural land, 19.87% forested land, 10.33% urban land, 1.02% nonforested wetlands, and 0.92% water. There is a moderate to high potential for growth in this watershed, which includes the City of North Myrtle Beach.

Identify specific pollutants, if known: Because a large portion of the watershed is in agricultural production, the potential exists for herbicides and other pollutants to enter the offsite tributary. This land use requires regular manipulation of the soil, which creates an increase in suspended sediments within the downstream tributaries. A review of the SCDHEC watershed assessment for HUC 03040206-07 revealed a downstream monitoring station located on Buck Creek (PD-362). According to the watershed assessment, Buck Creek is a blackwater system characterized by naturally low dissolved oxygen concentration conditions. Aquatic life and recreational uses are fully supported at this location; however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand, turbidity, and total nitrogen concentrations. There is also a significant decreasing trend in pH.

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

☒ Riparian corridor. Characteristics (type, average width): A review of aeriels determined that this tributary supports an approximately 600' wide riparian corridor. This riparian zone contributes to the overall health of the aquatic system by filtering out pollutants and preventing erosion.

- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
- ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

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

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

Properties:

Wetland size:(JD Wetland #6) 0.12 acres

Wetland type. Explain: Palustrine forested.

Wetland quality. Explain: Fully Functional.

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

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

Flow is: Ephemeral. Explain: JD Wetland #6 is connected to the downstream pRPW via a non-jurisdictional ditch that flows after rainfall events.

Surface flow is: Discrete and confined

Characteristics: Flow from the wetland into the 3<sup>rd</sup> order stream is 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 wetland flows into Camp Branch 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: Site photographs submitted by the agent indicate no surface water present within JD Wetland #6. Land use in this watershed is comprised of 45.14% forested wetland, 22.58% agricultural land, 19.87% forested land, 10.33% urban land, 1.02% nonforested wetlands, and 0.92% water. There is a moderate to high potential for growth in this watershed, which includes the City of North Myrtle Beach

Identify specific pollutants, if known: Because a large portion of the watershed is in agricultural production, the potential exists for herbicides and other pollutants to enter the offsite tributary. This land use requires regular manipulation of the soil, which creates an increase in suspended sediments within the downstream tributaries. A review of the SCDHEC watershed assessment for HUC 03040206-07 revealed a downstream monitoring station located on Buck Creek (PD-362). According to the watershed assessment, Buck Creek is a blackwater system characterized by naturally low dissolved oxygen concentration conditions. Aquatic life and recreational uses are fully supported at this location; however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand, turbidity, and total nitrogen concentrations. There is also a significant decreasing trend in pH.

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

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☒ Vegetation type/percent cover. Explain: Nyssa biflora, Quercus phellos, Acer rubrum, Pinus taeda, and Woodwardia aereolata.
- ☐ Habitat for:
- ☐ Federally Listed species. Explain findings: .
- ☐ Fish/spawn areas. Explain findings: .
- ☐ Other environmentally-sensitive species. Explain findings: .
- ☐ Aquatic/wildlife diversity. Explain findings: .

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

All wetland(s) being considered in the cumulative analysis: **10**

Approximately ( 2,630 ) 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> |
|------------------------------|------------------------|------------------------------|------------------------|
| Y                            | 1.45                   | N                            | 0.12                   |
| Y                            | 0.36                   | N                            | 134                    |
| Y                            | 0.25                   | N                            | 255                    |
| Y                            | 1.80                   | N                            | 235                    |
| Y                            | 0.15                   |                              |                        |
| Y                            | 2,000                  |                              |                        |

Summarize overall biological, chemical and physical functions being performed: The perennial RPW named Camp Branch, and its adjacent wetlands, are performing important biological, chemical, and physical functions within a 9,136.3 acre drainage area. According to the SCDHEC Watershed Assessment, this watershed (HUC 03040206-07) is comprised of 45.14% forested wetland, 22.58% agricultural land, 19.87% forested land, 10.33% urban land, 1.02% nonforested wetlands, and 0.92% water. The watershed has a large percentage of agricultural land use, which means the potential exists for herbicides and sediments to enter the downstream TNW. The majority of the wetlands in this drainage area are depressional and are situated relatively low in the landscape and receive and store runoff from the uplands. This water storage prevents flood flows from high rainfall events from moving quickly downstream. The perennial RPW and its adjacent wetlands are acting as a catch basin to help filter out pollutants from the neighboring agricultural land. This wetland system enhances wildlife diversity, supports the downstream food web, and provides nutrient fixation, flood attenuation, and flow maintenance functions. See Section 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 named Camp Branch and all similarly situated and adjacent freshwater wetlands are collectively performing functions consistent with the following: Biological – wetlands adjacent to this RPW include depressional wetlands. As such a variety of biological functions are being performed which include providing breeding grounds and shelter for aquatic species and foraging areas for wetland dependent species. These wetlands and the RPW 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. Chemical – the wetlands and RPW in the drainage area are providing the important collective functions of the removal of excess nutrients from the downstream TNW. These pollutants, which are contributed by runoff from the adjacent uplands, are prevented from being discharged downstream due to suspended sediments and other pollutants being retained within the wetlands. The low velocity and gradient of the RPW also contributes to the removal of pollutants because the suspended pollutants have time to settle out of the water. This reduces nitrogen and phosphorus loading downstream and effectively prevents oxygen depletion that can result from eutrophication. Physical – The RPW and adjacent wetlands are collectively performing flow maintenance functions, including retaining runoff inflow and storing rainwater temporarily. Flow maintenance results in the reduction of downstream peak flows (discharge and volumes), helping to maintain seasonal flow volumes and reducing the frequency of overbank events which flood adjacent properties. Increased water velocity also increases the rate of erosion downstream, which not only leads to a loss of land but also increases the amount of sediment and other pollutants in the TNW. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of the Waccamaw River, it has been determined that there is a significant nexus between the relevant reach of Camp Branch, a 3<sup>rd</sup> order stream, and all adjacent wetlands to the downstream TNW.

**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: Camp Branch, depicted as a 3<sup>rd</sup> order stream, was determined to have perennial flow based on a review of the NHD, topographic map, NWIs, and soil survey. This offsite tributary is depicted on the NHD and topographic map as a solid blue line. The NWIs map this tributary as R2UBH, which is a lower perennial tributary. The soil survey maps this tributary and its abutting wetlands as Meggett, a hydric soil. Camp Branch flows south into Buck Swamp, a perennial RPW, which flows southeast into the Waccamaw 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: linear feet width (ft).

- ☐ Other non-wetland waters:          acres.  
Identify type(s) of waters:          .

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

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

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

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

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

- ☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  
☒ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: The five onsite jurisdictional wetlands that directly abut the offsite tributary named Camp Branch were determined to be portions of the same wetland system that continues east and intersects with the boundary of Camp Branch. These wetlands are mapped PFO1Cd on the NWIs and as Meggett, a hydric soil, on the soil survey.  
☐ 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: 1.45 a. (JD Wetland #1) + 0.36 a. (JD Wetland #2) + 0.25 a. (JD Wetland #3) + 1.80 a. (JD Wetland #4) + 0.15 a. (JD Wetland #5) = 4.01 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: 0.12 (JD Wetland #6) acres.

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

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

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

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

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- ☐ Demonstrate that impoundment was created from “waters of the U.S.,” or  
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

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

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

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

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

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

☐ 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.

**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): Three non-jurisdictional ditches and a non-jurisdictional pond are located on site.

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 Southern Palmetto Environmental.

☒ 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: USGS Topographic Map / 7.5 Minute Index / Pireway Quad.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Soil Survey Geographic Database (SSURGO) Map Service created on March 31, 2021, and updated on April 26, 2021.

☒ National wetlands inventory map(s). Cite name: Wetlands Raster REST Map dated March 30, 2021, and updated on May 19, 2021.

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

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

☒ Photographs: ☒ Aerial (Name & Date): Google Earth aerials dated January 23, 2021, and April 12, 2016.  
or ☒ Other (Name & Date): Site photographs submitted by the agent dated March 31, 2022.

☐ Previous determination(s). File no. and date of response letter: .

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .

☐ Other information (please specify): .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The five onsite jurisdictional wetlands that directly abut the offsite tributary named Camp Branch were determined to be portions of a wetland system that continues east and intersects with the boundary of Camp Branch. These wetlands are mapped PFO1Cd on the NWIs and as Meggett, a hydric soil, on the soil survey. The non-abutting wetland, JD Wetland #6, was determined to have a significant nexus to Camp Branch in Section IIIC above. Camp Branch, depicted as a 3<sup>rd</sup> order stream, was determined to have perennial flow based on a review of the NHD, topographic map, NWIs, and soil survey. This offsite tributary is depicted on the NHD and topographic map as a solid blue line. The NWIs map this tributary as R2UBH, which is a lower perennial tributary. The soil survey maps this tributary and its abutting wetlands as Meggett, a hydric soil. Camp Branch flows south into Buck Swamp, a perennial RPW, which flows southeast into the Waccamaw River, a TNW.