

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): January 23, 2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 1; SAC 2007-01791-4E Howard Smith Industrial Park

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: **Marion** City:
Center coordinates of site (lat/long in degree decimal format): Lat. **34.194724° N**, Long. **-79.283364° W**.
Universal Transverse Mercator:

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

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

Name of watershed or Hydrologic Unit Code (HUC): **HUC: 03040204-08**

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): **December 11, 2013; March 18, 2014**

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: **6,300** linear feet: **7** width (ft) and/or (Jurisdictional Perennial RPW 1-A, 1-B, and 1-C) **1.02** acres.

Wetlands: (Wetland "A") **0.95 a.** + (Wetland "B") **140.31 a.** + (Wetland "C") **2.41 a.** = **143.67** 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 pond was assessed within the project area and determined to be non-jurisdictional. This pond was determined to be excavated out of uplands and surrounded by uplands with no potential connection to any other Waters of the US and therefore determined to not be an impoundment of any waters of the United States.**

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

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

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Little Pee Dee River.**

Summarize rationale supporting determination: **According to the USACE Navigability Study Report No. 12, the Little Pee Dee River's limit of navigable waters is located at River Mile (RM) 98. Reedy Creek enters the Little Pee Dee River approximately at RM 33.**

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: **217,821 acres** ; HUC **03040204-08**

Drainage area: **1400 acres**

Average annual rainfall: **approx. 50** inches

Average annual snowfall: **approx. 2** inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **1** tributaries before entering TNW.

Project waters are **15-20** river miles from TNW.

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

Project waters are **10-15** 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: **The project waters originate on site and do not cross or serve as state boundaries.**

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

Identify flow route to TNW⁵: **The unnamed perennial RPW flows into Reedy Creek, a perennial RPW. Reedy Creek flows into the Little Pee Dee River, a TNW.**

Tributary stream order, if known: **The unnamed perennial RPW is a 1st order stream.**

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

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: **The on-site perennial RPW was excavated out of a former Carolina Bay and continues south where it flows into Reedy Creek.**

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

Average width: **5 feet**

Average depth: **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: The perennial RPW is relatively stable with no erosion or sloughing banks observed.

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

Tributary geometry: **Relatively straight. A review of the aerial photography depicts this tributary as predominately 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: **The tributary was observed at its upstream end (at the western end of the site) and flowing water and water-stained leaf litter were observed. Further downstream, the tributary had several flow indicators such as a sandy bottom free of leaf litter, debris, and vegetation, an OHWM, and changes in the soil substrate. The tributary is also depicted as a shaded linear feature on the aeriels and as wetlands (PFO1Bd) on the NWIs. This feature is mapped hydric soils (Rutledge) on the soil survey. This tributary is typical of a low gradient stream with perennial flow and low velocity.**

Other information on duration and volume: **This tributary is recharged by groundwater and also receives overland sheetflow from several abutting wetlands. Several man-made features are also observed on the aeriels as flowing into this tributary via discrete and confined flow.**

Surface flow is: **Discrete and confined.** Characteristics: **Surface flow is restricted under normal circumstances between the bed and banks of the tributary.**

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:

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.

- | | |
|--|--|
| <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 tributary is characteristic of a blackwater system with clear, flowing water present. No oily film or discoloration was observed within the tributary. Land use in this watershed is comprised of over 45 % forested wetlands, 30% agricultural land, 16% forested land, and 4% urban land. Additional land uses include scrub/shrub land, water, and non-forested wetlands. According to the SCDHEC Watersheds website, there is a low potential for growth in this watershed.**

Identify specific pollutants, if known: **Because a large portion of the watershed is in agricultural production, the potential exists for herbicides and other pollutants used in agricultural practices to enter the 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 website revealed a downstream monitoring station located on Reedy Creek (RS-01042) that found that aquatic and recreational uses are fully supported. Although dissolved oxygen excursions occurred, they are typical of values seen in a blackwater system and are considered natural.**

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

- Riparian corridor. Characteristics (type, average width): **The upstream portion of this tributary has a forested riparian zone that is approximately 300' wide; however, this riparian zone is only located on the northeastern side of the tributary. This riparian zone contributes to the overall health of the aquatic system by filtering out pollutants and preventing erosion.**
- Wetland fringe. Characteristics: **The upstream portions of this tributary have wetlands located on the northwestern side.**
- 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: **(Wetland "A") 0.95 a. + (Wetland "B") 140.31 a. + (Wetland "C") 2.41 a. = 143.67 acres**

Wetland type. Explain: **Palustrine forested wetlands that are saturated and partially drained/ditched.**

Wetland quality. Explain: **Slightly impaired - The on-site wetlands were clear-cut in the past and consist of primarily scrub/shrub vegetation.**

Project wetlands cross or serve as state boundaries. Explain: **The project wetlands are confined within the project area and do not cross or serve as state boundaries.**

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow.** Explain: **The on-site wetlands provide overland sheetflow into the adjacent tributary after major storm events and during the wet season.**

Surface flow is: **Overland sheetflow**

Characteristics: **The perennial RPW directly abuts Wetlands "B" and "C" and receives overland sheetflow from these wetlands. Wetland "A" is adjacent, non-abutting, and flows via overland sheetflow into the perennial RPW.**

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: **Wetland "A" is a portion of Wetland "B" that is separated by a man-made road; however, water and drainage patterns were observed between the two wetlands. Both Wetland "A" and Wetland "B" were inundated during both site visits.**
 - Ecological connection. Explain: .
 - Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **15-20** river miles from TNW.

Project waters are **10-15** 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 was present on the surface of Wetlands "A" and "B" during both site visits. No oily film or discoloration was observed. Land use in this watershed is comprised of over 45% forested wetlands, 30% agricultural land, 16% forested land, and 4% urban land. Additional land uses include scrub/shrub land, water, and non-forested wetlands. According to the SCDHEC Watersheds website, there is a low potential for growth in this watershed.**

Identify specific pollutants, if known: **Because a large portion of the watershed is in agricultural production, the potential exists for herbicides and other pollutants used in agricultural practices to enter the 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 website revealed a downstream monitoring station located on Reedy Creek (RS-01042) that found that aquatic and recreational uses are fully supported. Although dissolved oxygen excursions occurred, they are typical of values seen in a blackwater system and are considered natural.**

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: **The dominant vegetation in these wetlands is Facultative and consists of Acer rubrum, Liquidambar styraciflua, and Magnolia virginiana.**
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: **These wetlands enhance wildlife diversity through transitions between upland and aquatic systems.**

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

All wetland(s) being considered in the cumulative analysis: **6**
 Approximately () 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	0.95		
Y	140.31		
Y	2.41		
Y	36		
Y	5		
Y	2		

Summarize overall biological, chemical and physical functions being performed: **The perennial RPW that is an unnamed tributary of Reedy Creek, and its adjacent wetlands, are providing important biological, chemical, and physical functions within a predominately upland drainage area. According to the SCDHEC Watersheds website, this watershed consists of approximately 45% forested wetlands, 30% agricultural land, 16% forested land, and 4% urban land. The remaining land uses in this watershed include scrub/shrub land, non-forested wetlands, and water. The watershed is predominately rural with almost one-third of the land in agriculture production. The majority of the wetlands within the drainage area are depressional wetlands that are situated relatively low in the landscape and receive and store runoff from the surrounding uplands. This water storage prevents flood flows from high rainfall events from moving quickly downstream. The perennial RPW and its adjacent wetlands act as a catch basin to help filter out pollutants from the neighboring agricultural land and adjacent forestry practices. This wetland system enhances wildlife diversity, acts as catch basin filtering sediment and pollutants from surrounding croplands, supports the downstream food web, and provides nutrient fixation, flood attenuation and flow maintenance functions. See IILC.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 (pRPW) and all similarly situated and adjacent freshwater wetlands are collectively performing functions consistent with 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 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. Chemical- wetlands and tributary within the review area are providing the important collective functions of removal of excess nutrients into the downstream TNW. These pollutants, which are contributed by runoff from surrounding 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 tributary 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- Wetlands and tributary in the review area are collectively performing flow maintenance functions, including retaining runoff inflow and storing rain water 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 sediments 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 Little Pee Dee River, it has been determined that there is a significant nexus between the relevant reach of the tributary and all 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 on-site tributary was determined to have perennial flow based on two site visits as well as a review of the aerials, NWIs and soil survey. During both site visits, the on-site tributary had water flowing southeast and a defined bed and bank with an OHWM. Further downstream, multiple indicators of flow were observed such as a sandy channel free of vegetation, leaf litter, and debris, sediment sorting and wrack lines. The aerials depict this pRPW as a shaded linear feature, and the NWIs map the majority of this tributary as wetlands (PFO1/4B, PSS 4/1B, and PFO1Bd). The soil survey maps this area as having hydric soils (Pantego and Rains). This perennial RPW**

continues south where it flows into Reedy Creek, a perennial RPW. Reedy Creek flows south into the Little Pee Dee 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: **6,300** linear feet **7** 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: **Based on information obtained during two site visits as well as a review of the topographic map, soil survey, and NWIs, Wetlands "B" and "C" directly abut the on-site perennial RPW. During the site visit, these two wetlands were determined to continue south where they intersect with the on-site perennial RPW. The topographic map depicts these areas as wetlands that continue to the southern boundary of the site, where the perennial RPW is located. The soil survey maps these areas as Rains and Pantego, hydric soils. The NWIs map these areas as wetlands (PFO1/4B, PSS4/1B, and PFO1Bd).**

- 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: **(Wetland "B") 140.31 a. + (Wetland "C") 2.41 a. = 142.72 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: **(Wetland "A") 0.95 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

⁸See Footnote # 3.

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

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

Identify water body and summarize rationale supporting determination:

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

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .
- 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 pond was assessed within the project area and determined to be non-jurisdictional.**

This pond was determined to be excavated out of uplands and surrounded by uplands with no potential connection to any other Waters of the US and therefore determined to not be an impoundment of any waters of the United States .

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 by ECS Carolinas; plat by Nesbitt Surveying Co, Inc.**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **Mullins; The topographic map depicts Wetlands "A", "B", and "C" as forested wetlands. Wetlands "B" and "C" are depicted as intersecting with the southern boundary of the property where the perennial RPW is located.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **The majority of the site is mapped hydric soils (Pantego, Rutledge, and Rains).**
- National wetlands inventory map(s). Cite name: **The wetlands on site are mapped as wetlands on the NWIs (PSS4/1B, PSS4B, and PFO1/4B).**

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.

- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **99:11221:90, SCDNR 2006; The aeriels on site depict the wetlands as forested and the perennial RPW as a shaded linear feature.**
or Other (Name & Date): **Site visit photographs dated December 11, 2013, and March 18, 2014 .**
- Previous determination(s). File no. and date of response letter: **Previous JD (SAC 2007-01791-4E) letter dated February 13, 2008.**
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: The on-site tributary was determined to have based on two site visits as well as a review of the aeriels, NWIs and soil survey. During both site visits, the on-site tributary had water flowing southeast and a defined bed and bank with an OHWM. Further downstream, multiple indicators of flow were observed such as a sandy channel free of vegetation, leaf litter, and debris, sediment sorting and wrack lines. The aeriels depict this pRPW as a shaded linear feature, and the NWIs map the majority of this tributary as wetlands (PFO1/4B, PSS4/1B, and PFO1Bd). The soil survey maps this area as having hydric soils (Pantego and Rains). This perennial RPW continues south where it flows into Reedy Creek, a perennial RPW. Reedy Creek flows south into the Little Pee Dee River, a TNW.

A pond was assessed within the project area and determined to be non-jurisdictional. This pond was determined to be excavated out of uplands and surrounded by uplands with no potential connection to any other Waters of the US and therefore determined to not be an impoundment of any waters of the United States.

Jurisdictional Wetlands "B" and "C" directly abut the on-site perennial RPW. During the site visit, these two wetlands were determined to continue south where they intersect with the on-site perennial RPW. The topographic map depicts these areas as wetlands that continue to the southern boundary of the site, where the perennial RPW is located. The soil survey maps these areas as Rains and Pantego, hydric soils. The NWIs map these areas as wetlands (PFO1/4B, PSS4/1B, and PFO1Bd). Jurisdictional Wetland "A" was determined to be adjacent, non-abutting to the on-site perennial RPW. The tributary and all adjacent wetlands were determined to have a significant nexus to the downstream TNW documented in Section III C above .