

**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):** May 25, 2016

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** JD Form 1 of 2; SAC 2015-00997 / DOCO Ashley River Park

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** Bacons Bridge Road TMS# 161-00-00-074

State: South Carolina

County/parish/borough: **Dorchester** City: **Summerville**

Center coordinates of site (lat/long in degree decimal format): Lat. **32.957717° N**, Long. **80.195787° W**.

Universal Transverse Mercator:

Name of nearest waterbody: **Ashley River**

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

Name of watershed or Hydrologic Unit Code (HUC): **03050201**

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: **May 25, 2016**

Field Determination. Date(s): **September 29, 2015 by Steven Currie**

**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):<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: **6794** linear feet:          width (ft) and/or          acres.

Wetlands: **3.336** acres.

**\*\*\* This Basis form discusses abutting Jurisdictional Wetlands 1 – 6, 10 and 17; adjacent but not abutting Jurisdictional Wetland 9; and Jurisdictional pRPWs A – D and H and I. \*\*\***

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

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup> [Including potentially jurisdictional features that upon**

<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.

**assessment are NOT waters or wetlands]**

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **There are five ponds designated Non-jurisdictional Upland Excavated Ponds A - F, totaling 7.216 acres. The ponds are open water features that were excavated from uplands and are not subject to jurisdiction.**

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**

\*\*\* This section refers to Jurisdictional pRPWs A – D and H and I which flow into the Ashley River which is a Section 10 TNW at this location. The Ashley River is located outside the project review area \*\*\*

**(i) General Area Conditions:**

Watershed size: **86,887 acres** ;  
Drainage area: **90.2 acres**  
Average annual rainfall: **48 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 **1 (or less)** river miles from TNW.

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

<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 **1 (or less)** 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:

Identify flow route to TNW<sup>5</sup>:  
Tributary stream order, if known:

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

Tributary is:  Natural  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain:

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

Average width: **4** feet  
Average depth: **1** feet  
Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Based on aerial photography the pRPWs appear to be stable.**

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Meandering**. **Based on aerial photography and LIDAR data, the pRPWs are part of a braided stream system that flows into or is part of the Ashley River.**

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:

Other information on duration and volume:

Surface flow is: **Confined**. Characteristics:

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

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks  
 OHWM<sup>6</sup> (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.<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:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list):

<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.

(iii) **Chemical Characteristics:**

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

Explain: **Water quality is expected to be fair to good. The pRPWs are located in an undeveloped area adjacent to a residential neighborhood, so, runoff and discharges of some pollutants are possible.**

Identify specific pollutants, if known:

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

Riparian corridor. Characteristics (type, average width): **Within the project area the width of the corridor varies along the length of the pRPWs and ranges from 100' to 200'. The corridor within the project area is undeveloped and is either wooded or grass covered to the banks of the pRPWs until it reaches the Ashley River.**

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: **The pRPWs likely provide habitat for various aquatic organisms including fish, reptiles, amphibians, as well as various birds and mammals.**

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

\*\*\* There are multiple wetlands within the project area. Previously, 39,239 acres of wetlands were protected under USACE Permit 2001-1P-104. This JD considers the 3,336 acres of new wetlands that are part of the greater wetland system. Jurisdictional Wetlands 1 – 6, 10 and 17, directly abut the pRPWs. Wetlands 9 is adjacent to, but not abutting the pRPWs. For the purposes of this determination, only the new wetland areas will be discussed. Wetlands 1 and 6 are part of an existing wetland system that abuts the pRPW designated Tributary I. Wetland 2 is part of an existing wetland system that abuts the pRPW designated Tributary A. Wetland 3 is part of an existing wetland system that abuts the pRPW designated Tributary B. Wetlands 4, 5, 10 and 17 directly abut the pRPW designated Tributaries C, D, H and I which is the same tributary channel (but named separately on the plat). Wetland 9 is adjacent to the existing protected wetland system that directly abuts Tributary D. \*\*\*

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: **3,336** acres

Wetland type. Explain: **Forested.**

Wetland quality. Explain: **Wetland quality appeared to be good. There were no obvious signs of degradation.**

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Perennial flow**. Explain: **Water flows from the wetlands into the pRPWs which then flow into the Ashley River. The flow of the tributaries is perennial.**

Surface flow is: **Confined**

Characteristics:

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

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting:

**Wetlands 1 and 6 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD, all of which abut the pRPW designated Tributary I as the pRPW flows through the wetland.**

**Wetland 2 is a new wetland and is part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary A as the pRPW flows through the wetland.**

**Wetland 3 is a new wetland and is part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary B as the pRPW flows through the wetland.**

**Wetlands 4, 5, 10 and 17 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD, all of which directly abut the pRPWs designated Tributaries C, D, H and I which is the same tributary channel (but named separately on the plat) as the pRPWs flow through the wetlands.**

Not directly abutting

Discrete wetland hydrologic connection. Explain: **Adjacent Jurisdictional Wetland 9 is part of the greater wetland system located on site. It has a hydrologic connection to Tributary D via a discrete hydrologic connection between Wetland 9 and wetlands previously protected by USACE Permit 2001-1P-104. The connection is due to the close proximity to the previously protected wetlands, similar hydric soil types, and occupying a similar elevation as the previously protected wetlands. Wetland 9 also lies within the flood plain of the Ashley River.**

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **1 (or less)** river miles from TNW.

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

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

Estimate approximate location of wetland as within the **2-year or less** 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: **Water quality is expected to be fair to good. The pRPWs are located in an undeveloped area adjacent to a residential neighborhood, so, runoff and discharges of some pollutants are possible.**

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: **The wetlands likely provides habitat for various aquatic organisms including fish, reptiles, amphibians, as well as various birds and mammals.**

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

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

Approximately ( **3.386** ) 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>
<b>Wetland 1 (Y)</b>	<b>0.120</b>	<b>Wetland 10 (Y)</b>	<b>0.006</b>
<b>Wetland 2 (Y)</b>	<b>0.394</b>	<b>Wetland 17 (Y)</b>	<b>0.088</b>
<b>Wetland 3 (Y)</b>	<b>0.403</b>	<b>Offsite Wetland 1 (N)</b>	<b>0.05</b>
<b>Wetland 4 (Y)</b>	<b>0.282</b>		
<b>Wetland 5 (Y)</b>	<b>0.501</b>		
<b>Wetland 6 (Y)</b>	<b>1.455</b>		
<b>Wetland 9 (N)</b>	<b>0.087</b>		

Summarize overall biological, chemical and physical functions being performed: **The review area includes the onsite 3.336 acre wetlands, and approximately 6,794 linear feet of onsite perennial Relatively Permanent Waters. The review area includes an area that flows directly into the Ashley River. Such wetland systems provide a variety of functions that are important for the downstream waters and the watershed as a whole. The wetlands not only provide habitat for various aquatic and terrestrial organisms, including a variety of insects, amphibians, reptiles, mammals and birds, but are also a source of food, nutrients, and carbon for organisms located downstream. The wetlands are especially important for the water quality of a watershed. Water runoff from adjacent uplands that may contain pollutants, sediments, excess nutrients, etc. that flow through the wetlands before entering the tributaries has the opportunity to be filtered out prior to flowing to downstream TNWs. In addition, excess water can temporarily be stored thereby minimizing potential flooding of downstream areas and can also slowly release water downstream to maintain seasonal flow volumes. Runoff water may also transport organisms, nutrients, and carbon from the wetlands into the tributaries, which continue to flow to downstream TNWs.**

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 review area includes the onsite 3.336 acre wetland and approximately 6,794 linear feet of onsite perennial Relatively Permanent Waters. The review area includes an area that flows directly into the Ashley River. Such wetland systems provide a variety of functions that are important for the downstream waters and the watershed as a whole. The wetlands not only provide habitat for various aquatic and terrestrial organisms, including a variety of insects, amphibians, reptiles, mammals and birds, but are also a source of food, nutrients, and carbon for organisms located downstream. The wetlands are especially important for the water quality of a watershed. Water runoff from adjacent uplands that may contain pollutants, sediments, excess nutrients, etc. that flow through the wetlands before entering the tributaries has the opportunity to be filtered out prior to flowing to downstream TNWs. In addition, excess water can temporarily be stored thereby minimizing potential flooding of downstream areas and can also slowly release water downstream to maintain seasonal flow volumes. Runoff water may also transport organisms, nutrients, and carbon from the wetlands into the tributaries, which continue to flow to downstream TNWs. The onsite pRPWs drain directly into the Ashley River (TNW). According to SCDHEC's Watershed Water Quality Assessments, at the upstream monitoring station, CSTL-102 (located adjacent to the drainage area) for this cumulative review and the discharge point for the onsite pRPWs into the Ashley River, aquatic life uses are fully supported for both fresh and saltwater classifications. Although dissolved oxygen excursions occurred, they were typical of values seen in such systems and were considered natural, not standard violations. There is a significant increasing trend in pH. A significant decreasing trend in total nitrogen concentration suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions for both classifications. The watershed that the project review area is located in, HUC 03050201-06, has a high potential for growth and includes the Town of Summerville, Ladson, and the Cities of Charleston and North Charleston. The area surrounding the project review area is partially developed with residential neighborhoods on the north side of the project area and undeveloped areas to the south with the potential for future development to occur. When wetlands and streams are filled or altered, many of the services that they provide are compromised and the loss of those services affects downstream TNWs. The wetlands and tributary within the review area have a significant nexus to downstream TNWs as they provide a source of carbon and nutrients, can provide water quality functions, can store excess water minimizing flooding impacts downstream, can maintain seasonal flow volumes, and can transport organisms, carbon, nutrients, sediments, clean water, as well as pollutants, such as those associated with heavy traffic, landscaping chemicals, etc. found within the review area, that may be present or could become present, to downstream TNWs.**

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

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

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

- TNWs: linear feet width (ft), Or, acres.
- Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: **The onsite pRPWs had beds, banks and an ordinary highwater marks and had flow at the time of the site visit. The pRPWs flow directly into the Ashley River which at this point is a TNW. The wetlands 1 – 6, 10 and 17 directly abut the pRPWs.**
- 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 1 and 6 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD, all of which abut the pRPW designated Tributary I as the pRPW flows through the wetland.**

**Wetland 2 is a new wetland and is part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary A as the pRPW flows through the wetland.**

**Wetland 3 is a new wetland and is part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary B as the pRPW flows through the wetland.**

**Wetlands 4, 5, 10 and 17 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD, all of which directly abut the pRPWs designated Tributaries C, D, H and I which is the same hydrologic feature as the pRPWs flow through the wetlands.**

- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

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

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

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

Provide acreage estimates for jurisdictional wetlands in the review area: **0.087** 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.

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

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).

**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):<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:**

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): **There are five ponds designated Non-jurisdictional Upland Excavated Ponds A - F, totaling 7.216 acres. The ponds are open water features that were excavated from uplands and are not subject to jurisdiction.**

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: **Maps, plans data sheets provided by Tyler Sgro of Sabine and Waters..**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.

<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.

- Office concurs with data sheets/delineation report.
- Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **1:24000 USGS Stallville Quad map provided by Tyler Sgro dated 7/29/2015.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **NRCS Soils map provided by Tyler Sgro dated 7/29/2015.**
- National wetlands inventory map(s). Cite name: **NWI wetlands map provided by Tyler Sgro dated 7/29/2015.**
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): **Aerial map provided by Tyler Sgro dated 7/29/2015.**  
or  Other (Name & Date): **Undated site photos provided by Tyler Sgro.**
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): **Plat provided by Tyler Sgro prepared by Parker Land Surveying, LLC, entitled, "Wetland Delineation Map Prepared For Dorchester County South Carolina TMS# 161-00-00-074," dated 01-05-2016.**

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The project area is an 87.263 acre site with 39.239 acres of previously protected wetlands, associated with USACE Permit 2001-1P-104, and 3.336 acres of newly designated wetlands that are part of the greater wetland system within the project area. There are also 6794 linear feet of perennial Relatively Permanent Waters (pRPW) within the project area that drain directly into the Ashley River a TNW. As a result, the newly designated wetlands and the pRPWs are subject to jurisdiction under section 404 of the Clean Water Act.

**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):** May 25, 2016

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** JD Form 2 of 2; SAC 2015-00997 / DOCO Ashley River Park

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** Bacons Bridge Road TMS# 161-00-00-074

State: South Carolina County/parish/borough: **Dorchester** City: **Summerville**  
Center coordinates of site (lat/long in degree decimal format): Lat. **32.957717° N**, Long. **80.195787° W**.  
Universal Transverse Mercator:

Name of nearest waterbody: **Ashley River**

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

Name of watershed or Hydrologic Unit Code (HUC): **03050201**

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: **May 25, 2016**

Field Determination. Date(s): **September 29, 2015 by Steven Currie**

**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):<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: **2613** linear feet: width (ft) and/or acres.

Wetlands: **4.607** acres.

**\*\*\* This Basis form discusses the abutting Jurisdictional Wetlands 7, 8 and 13 - 16; adjacent but not abutting Jurisdictional Wetlands 11 and 12; and Jurisdictional pRPWs E, F and G. \*\*\***

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

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup> [Including potentially jurisdictional features that upon**

<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.

**assessment are NOT waters or wetlands]**

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

SECTION III: CWA ANALYSIS

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

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**

\*\*\* This section refers to Jurisdictional pRPWs E, F and G which flow into the Ashley River which is a Section 10 TNW at this location. The Ashley River is located outside the project review area \*\*\*

**(i) General Area Conditions:**

Watershed size: **86,887 acres** ;  
Drainage area: **168 acres**  
Average annual rainfall: **48 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 **1 (or less)** river miles from TNW.  
Project waters are **1 (or less)** river miles from RPW.  
Project waters are **1 (or less)** aerial (straight) miles from TNW.

<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 **1 (or less)** 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:

(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: **4** feet  
Average depth: **1** feet  
Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Based on aerial photography the pRPWs appear to be stable.**

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Meandering. Based on aerial photography and LIDAR data, the pRPWs are part of a braided stream system that flows into the Ashley River.**

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:

Other information on duration and volume:

Surface flow is: **Confined.** Characteristics:

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

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks  
 OHWM<sup>6</sup> (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.<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:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list):

<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.

(iii) **Chemical Characteristics:**

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

Explain: **Water quality is expected to be fair to good. The pRPWs are located in an undeveloped area adjacent to a residential neighborhood, so, runoff and discharges of some pollutants are possible.**

Identify specific pollutants, if known:

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

Riparian corridor. Characteristics (type, average width): **Within the project area the width of the corridor varies along the length of the pRPWs and ranges from 100' to 200'. The corridor within the project area is undeveloped and is either wooded or grass covered to the banks of the pRPWs until it reaches the Ashley River.**

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: **The pRPWs likely provide habitat for various aquatic organisms**

**including fish, reptiles, amphibians, as well as various birds and mammals.**

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

\*\*\* There are multiple wetlands within the project area. Previously, 39,239 acres of wetlands were protected under USACE Permit 2001-1P-104. This JD considers the 4,607 acres of new wetlands that are part of the greater wetland system. Jurisdictional Wetlands 7, 8 and 13 - 16, directly abut the pRPWs. Wetlands 11 and 12 are adjacent to, but not abutting the pRPWs. For the purposes of this determination, only the new wetland areas will be discussed. Wetlands 7 and 8 are part of an existing wetland system that abuts the pRPW designated Tributary E. Wetlands 13 and 14 directly abut the pRPW designated Tributaries F. Wetlands 15 and 16 are part of an existing wetland system that abuts the pRPW designated Tributary G. Wetland 11 and 12 are adjacent to but not abutting Tributary G. Tributaries E and G are the same channel but are named separately on the plat. \*\*\*

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: **4,607** acres

Wetland type. Explain: **Forested.**

Wetland quality. Explain: **Wetland quality appeared to be good. There were no obvious signs of degradation.**

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Perennial flow**. Explain: **Water flows from the wetlands into the pRPWs which then flow into the Ashley River. The flow of the tributaries is perennial.**

Surface flow is: **Confined**

Characteristics:

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

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting:

**Wetlands 7 and 8 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD, all of which abut the pRPW designated Tributary E as the pRPW flows through the wetland.**

**Wetlands 13 and 14 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary F as the pRPW flows through the wetland.**

**Wetlands 15 and 16 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary G as the pRPW flows through the wetland.**

Not directly abutting

Discrete wetland hydrologic connection. Explain: **Adjacent Jurisdictional Wetlands 11 and 12 are part of the greater wetland system located on site. It has a hydrologic connection to Tributary G via a discrete hydrologic connection between Wetlands 11 and 12 and wetlands previously protected by USACE Permit 2001-1P-104. The connection is due to the close proximity to the previously protected wetlands, similar hydric soil types, and occupying a similar elevation as the previously protected wetlands. Wetlands 11 and 12 also lie within the flood plain of the Ashley River.**

- Ecological connection. Explain:
- Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW  
 Project wetlands are **1 (or less)** river miles from TNW.  
 Project waters are **1 (or less)** aerial (straight) miles from TNW.  
 Flow is from: **Wetland to navigable waters.**  
 Estimate approximate location of wetland as within the **2-year or less** 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: **Water quality is expected to be fair to good. The PRPWs are located in an undeveloped area adjacent to a residential neighborhood, so, runoff and discharges of some pollutants are possible.**

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: **The wetlands likely provides habitat for various aquatic organisms including fish, reptiles, amphibians, as well as various birds and mammals.**

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

All wetland(s) being considered in the cumulative analysis: **10**  
 Approximately ( 4.787 ) 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>
<b>Wetland 7 (Y)</b>	<b>0.71</b>	<b>Wetland 15 (Y)</b>	<b>0.029</b>
<b>Wetland 8 (Y)</b>	<b>2.00</b>	<b>Wetland 16 (Y)</b>	<b>.774</b>
<b>Wetland 11 (N)</b>	<b>0.041</b>	<b>Offsite Wetland 2 (Y)</b>	<b>0.17</b>
<b>Wetland 12 (N)</b>	<b>0.041</b>	<b>Offsite Wetland 3 (Y)</b>	<b>0.01</b>
<b>Wetland 13 (Y)</b>	<b>0.994</b>		
<b>Wetland 14 (Y)</b>	<b>0.018</b>		

Summarize overall biological, chemical and physical functions being performed: **The review area includes the onsite 4,607 acre wetlands, and approximately 2,613 linear feet of onsite perennial Relatively Permanent Waters. The review area includes an area that flows directly into the Ashley River. Such wetland systems provide a variety of functions that are important for the downstream waters and the watershed as a whole. The wetlands not only provide habitat for various aquatic and terrestrial organisms, including a variety of insects, amphibians, reptiles, mammals and birds, but are also a source of food, nutrients, and carbon for organisms located downstream. The wetlands are especially important for the water quality of a watershed. Water runoff from adjacent uplands that may contain pollutants, sediments, excess nutrients, etc. that flow through the wetlands before entering the tributaries has the opportunity to be filtered out prior to flowing to downstream TNWs. In addition, excess water can temporarily be stored thereby minimizing potential flooding of downstream areas and can also slowly release water downstream to maintain seasonal flow volumes. Runoff water may also transport organisms, nutrients, and carbon from the wetlands into the tributaries, which continue to flow to downstream TNWs.**

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 review area includes the onsite 4,607 acre wetland and approximately 2,613 linear feet of onsite perennial Relatively Permanent Waters. The review area includes an area that flows directly into the Ashley River. Such wetland systems provide a variety of functions that are important for the downstream waters and the watershed as a whole. The wetlands not only provide habitat for various aquatic and terrestrial organisms, including a variety of insects, amphibians, reptiles, mammals and birds, but are also a source of food, nutrients, and carbon for organisms located downstream. The wetlands are especially important for the water quality of a watershed. Water runoff from adjacent uplands that may contain pollutants, sediments, excess nutrients, etc. that flow through the wetlands before entering the tributaries has the opportunity to be filtered out prior to flowing to downstream TNWs. In addition, excess water can temporarily be stored thereby minimizing potential flooding of downstream areas and can also slowly release water downstream to maintain seasonal flow volumes. Runoff water may also transport organisms, nutrients, and carbon from the wetlands into the tributaries, which continue to flow to downstream TNWs. The onsite pRPWs drain directly into the Ashley River (TNW). According to SCDHEC's Watershed Water Quality Assessments, at the upstream monitoring station, CSTL-102 (located adjacent to the drainage area) for this cumulative review and the discharge point for the onsite pRPWs into the Ashley River, aquatic life uses are fully supported for both fresh and saltwater classifications. Although dissolved oxygen excursions occurred, they were typical of values seen in such systems and were considered natural, not standard violations. There is a significant increasing trend in pH. A significant decreasing trend in total nitrogen concentration suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions for both classifications. The watershed that the project review area is located in, HUC 03050201-06, has a high potential for growth and includes the Town of Summerville, Ladson, and the Cities of Charleston and North Charleston. The area surrounding the project review area is partially developed with residential neighborhoods on the north side of the project area and undeveloped areas to the south with the potential for future development to occur. When wetlands and streams are filled or altered, many of the services that they provide are compromised and the loss of those services affects downstream TNWs. The wetlands and tributary within the review area have a significant nexus to downstream TNWs as they provide a source of carbon and nutrients, can provide water quality functions, can store excess water minimizing flooding impacts downstream, can maintain seasonal flow volumes, and can transport organisms, carbon, nutrients, sediments, clean water, as well as pollutants, such as those associated with heavy traffic, landscaping chemicals, etc. found within the review area, that may be present or could become present, to downstream TNWs.**

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

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:  
 TNWs: linear feet width (ft), Or, acres.  
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**

Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: **The onsite pRPWs had beds, banks and an ordinary highwater marks. The pRPWs flow directly into the Ashley River which at this point is a TNW. During the site visit, the pRPW was flowing. The wetlands 7, 8 and 13-16 directly abut the pRPWs.**

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 7 and 8 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD, all of which abut the pRPW designated Tributary E as the pRPW flows through the wetland.**

**Wetlands 13 and 14 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary F as the pRPW flows through the wetland.**

**Wetlands 15 and 16 are new wetlands that are part of an existing wetland system that was previously protected by USACE Permit 2001-1P-104 and is not part of this JD which abuts the pRPW designated Tributary G as the pRPW flows through the wetland.**

Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

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

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

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

Provide acreage estimates for jurisdictional wetlands in the review area: **0.082** 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

<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.

- 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):<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:**

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: 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: **Maps, plans data sheets provided by Tyler Sgro of Sabine and Waters.**
- 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.

<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.

- U.S. Geological Survey map(s). Cite scale & quad name: **1:24000 USGS Stallsville Quad map provided by Tyler Sgro dated 7/29/2015.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **NRCS Soils map provided by Tyler Sgro dated 7/29/2015.**
- National wetlands inventory map(s). Cite name: **NWI wetlands map provided by Tyler Sgro dated 7/29/2015.**
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): **Aerial map provided by Tyler Sgro dated 7/29/2015.**  
or  Other (Name & Date): **Undated site photos provided by Tyler Sgro.**
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): **Plat provided by Tyler Sgro prepared by Parker Land Surveying, LLC, entitled, "Wetland Delineation Map Prepared For Dorchester County South Carolina TMS# 161-00-00-074," dated 01-05-2016.**

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The project area is an 87.263 acre site with 39.239 acres of previously protected wetlands, associated with USACE Permit 2001-1P-104, and 4.607 acres of newly designated wetlands that are part of the greater wetland system within the project area. There are also 2613 linear feet of perennial Relatively Permanent Waters (pRPW) within the project area that drain directly into the Ashley River a TNW. As a result, the newly designated wetlands and the pRPWs are subject to jurisdiction under section 404 of the Clean Water Act.