

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

Sheet 2 of 3: Relevant Reach 2

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): November 28, 2011**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Charleston, Jimmy Smoak / J. Shirer Site, SAC#2011-00841-2JR**

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

State: SC County/parish/borough: Orangeburg City: Orangeburg  
Center coordinates of site (lat/long in degree decimal format): Lat. 33.44828° N, Long. -80.83359° W.  
Universal Transverse Mercator:

Name of nearest waterbody: Crum Branch

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

Name of watershed or Hydrologic Unit Code (HUC): 3050206

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. Form 1 of 3 = Relevant Reach 1; Form 3 of 3 = Isolated wetland

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

Office (Desk) Determination. Date:

Field Determination. Date(s): 9/20/11

**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: SRPW-1 = 9205; linear feet: width (ft) and/or acres.

Wetlands: Total: 20.9 acres. Wetland B = 1.38 ac; Wetland C = 0.41 ac; Wetland H = 1.39 ac; Wetland I = 7.4 ac;

Wetland J = 10.32 ac.

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

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup> [Including potentially jurisdictional features that upon 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: Non-jurisdictional waters: Drainage Feature (DF) – B = 617 LF; DF-C = 573 LF; DF-H = 2716 LF; DF-J =

<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.

**929 LF. Each of these drainage features is an agricultural and/or upland cut ditch that provides a surface hydrologic connection between five on-site wetlands and SRPW-1. These are manmade conveyances and are representative of many of the ditches on this tract that do not exhibit an OHWM or flow.**

## 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

##### \*\*\*Seasonal RPW 1 \*\*\*

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

Watershed size: 2630 acres

Drainage area: 450 acres

Average annual rainfall: 48 inches

Average annual snowfall: <1.0 inches

##### (ii) Physical Characteristics:

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

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are 1-2 river miles from RPW.

Project waters are 1-2 aerial (straight) miles from TNW.

Project waters are 1-2 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

<sup>4</sup> 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 TNW<sup>5</sup>: SRPW-1 extends SE across the project site and flows off-site into Crum Branch which flows to Cow Castle Creek which flows to Four Hole Swamp which is an extensive system that extends through Dorchester County where it intersects with the Edisto River (TNW).

Tributary stream order, if known: .

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

**Tributary is:**  Natural  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain: SRPW-1 is approximately 4' wide and 3' deep. It had a bed and bank and OHWM with some water pooling in it at the time of the site visit, along with water stained leaves. There was no vegetation growing in the bed of the trib, but there were trees growing on the banks indicating that sufficient flow occurs in this trib to maintain the clear bottom without being artificially maintained by excavation. SRPW-1 flows southeast across the subject tract, and is depicted on the quad/topo maps as a blue line stream carrying drainage/flow from the subject tract to downstream waters. In addition, there are a number of non-jurisdictional conveyances that discharge into SRPW-1. At one time, SPRW-1 may have been a natural system as it flows in a curved pattern through a large, wooded, undeveloped area in the middle of the site, before intersecting downstream with Crum Branch. Further, this SRPW-1 is shown as a blue line stream on the quad sheets.

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

\*\*\*SRPW-1\*\*\*

Average width: 4 feet  
 Average depth: 3 feet  
 Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: <1% cattails  
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable.

Presence of run/riffle/pool complexes. Explain: NA.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): <1 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **11-20**

Describe flow regime: flow is based on rainfall/storm events.

Other information on duration and volume: .

Surface flow is: **Discrete and 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: .

<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.

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

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

(iii) **Chemical Characteristics:**

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

Explain: Water was stained - clear/brown, but there was no evidence of oil or contaminants in the water.

Identify specific pollutants, if known: .

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

Riparian corridor. Characteristics (type, average width): There is a wooded fringe along SRPW-1 that is approximately 40 feet wide . This wooded area proviese a wildlife corridor where wildlife can traverse across the agricultural fields to reach wooded areas and/or other wetlands and tributaries in the vicinity .

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 channels have some vegetation, leaf litter, and debris that may provide habitat for small organisms such as insects, reptiles and amphibians. Larger wildlife such as mammals, and avian species may utilize the wooded corridor to move from wetland to wetland as the seasonal RPW providse hydrologic connections between Wetlands B, C, H, I, and J with SPRW-1.

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: WB = 1.38; WC = 0.42; WH = 1.39; WI = 7.4; WJ = 10.32 acres

Wetland type. Explain: palustrine/forested.

Wetland quality. Explain: The quality of the wetlands appeared to be good.

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

(b) General Flow Relationship with Non-TNW:

**WB:** Flow is: **Intermittent flow**. Explain: WB is connected to SRPW-1 via a non-jurisdictional drainage feature (DF-B) which extends along the northern boundary of the wetland east to SRPW-1. Flow is intermittent and may occur seasonally and /or after rain events when surface water in the wetland may be present.

**WC:** Flow is: **Intermittent flow**. Explain: WC is connected to SRPW-1 via a non-jurisdictional drainage feature (DF-C) which extends from the southern edge of the wetland south to SRPW-1. Flow is intermittent and may occur seasonally and /or after rain events when surface water in the wetland may be present.

**WH:** Flow is: **Intermittent flow**. Explain: WH is connected to SRPW-1 via a non-jurisdictional drainage feature (DF-H) which extends from the SE edge of the wetland and turning SW to SRPW-1. Flow is intermittent and may occur seasonally and /or after rain events when surface water in the wetland may be present.

**WI:** Flow is: **No Flow** . Explain: Wetland I extends off-site to the south towards Wetland H and Wetland H extends off-site to the north towards Wetland I. The soils (Lynchburg and Coxville) encompass both wetlands I and H and there is not a significant change in topograpy between them. Further, infrared aerial photos depict that there is no change in the vegetation signatures between the two wetlands indicating that they may connect as one wetland off-site. Wetland H intersects with SRPW-1 via DF-H and to the south. Based on the above, a hydrologic connection exists between this wetland system and SRPW-1.

**WJ:** Flow is: **Intermittent flow**. Explain: WJ is connected to SRPW-1 via a roadside ditch and piping under Highway 21 to a non-jurisdictional drainage feature (DF-J) which extends from Highway 21 east to SRPW-1. Flow is intermittent and may occur seasonally and /or after rain events when surface water in the wetland may be present.

**WB:** Surface flow is: **Discrete and confined**

**WC:** Surface flow is: **Discrete and confined**

**WH:** Surface flow is: **Discrete and confined**

**WI:** Surface flow is: **Not present**

**WJ:** Surface flow is: **Discrete and confined**

Characteristics:

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: WB and WH have a hydrologic connection with SRPW-1 via linear non-jurisdictional drainage features DF-B and DF-H, respectively, (as discussed further on this form). WC and WJ have a hydrologic connection with SRPW-1 via linear non-jurisdictional drainage features DF-C and DF-J, respectively, (as discussed further in this JD form).

Ecological connection. Explain: WI extends off-site and is located approx. 300 feet north of WH/SRPW-1. WI is surrounded by forest on three sides and cropland on a portion of the eastern side. The wetland and surrounding forest provide a pathway for wildlife to move between the wetland and WH/SRPW-1, as well as other wetlands and tributaries. The same soils (Coxville and Lynchburg) and NWI (forested wetland) encompass the wetlands. Due to the proximity of WI and WH, and the soils and NWI characteristics, organisms that utilize forested wetlands, such as mammal, reptiles, amphibians and birds, may also travel between and utilize WI and WH/SRPW-1.

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **1-2** aerial (straight) miles from TNW.

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

Estimate approximate location of wetland as within the **20 - 50-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: No water observed during the site visit.

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: All wetlands have mature forest canopy with sapling and herbaceous layers.

Various species 100% cover.

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: Wetlands B, C, H, I and J are forested wetlands that are associated with non-jurisdictional drainage features and SRPW-1 along with upland forested areas and adjacent agricultural land. The vegetation present within these wetlands is diverse and may include species such as *Quercus phellos*, *Pinus taeda*, *gordonia lasianthus*, *clethra alnifolia*, *laportea canadensis*, *Taxodium distichum*, *liquidambar styraciflua*, *acer rubrum*, *toxicodendron radicans* and *andathyrium filix-femina*. Diverse forested wetlands often attract diverse wildlife, which may include large and small mammals, resident and migratory bird species, and a variety of herptile fauna and insects. The wetlands provide a "safe haven" for organisms moving between wetlands and tributaries in the vicinity, in addition to providing habitat for all or part of the lives of wildlife using the wetland.

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

All wetland(s) being considered in the cumulative analysis: **5**

Approximately ( 20.91 ) acres in total are being considered in the cumulative analysis.

Wetland B is adjacent to SRPW-1 via DF-B

Wetland C is adjacent to SRPW-1 via DF-C

Wetland H is adjacent to SRPW-1 via DF-H

Wetland I is adjacent to SRPW-1 via DF-H

Wetland J is adjacent to SRPW-1 via DF-J

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>
WB	N	1.38			
WC	N	0.42			
WH	N	1.39			
WI	N	7.40			
WJ	N	10.32			

Summarize overall biological, chemical and physical functions being performed: This review area includes Wetlands B, C, H, I, and J, as well as SRPW-1, and is approximately 450 acres in size comprised of approximately 20.91 acres of wetlands, and 9205 linear feet of SRPW. The review area includes a seasonal RPW and adjacent wetlands. The review area consists of SRPW-1, Wetland B, Wetland C, Wetland H, Wetland I, and Wetland J. Headwater systems provide a variety of functions that are important for the downstream waters and the watershed as a whole. The wetlands and tributaries not only provide habitat for various aquatic and terrestrial organisms, including a variety of insects, amphibians, reptiles, mammals, and birds, but area also a source of food, nutrients, and carbon for organisms located downstream. The headwater wetlands and tributaries are especially important for the water quality of a watershed. Water runoff from adjacent uplands that may contain pollutants, sediments, excess nutrients (i.e. phosphorus and nitrogen), etc., that flows through the wetlands before entering the tributaries may be filtered out prior to flowing to downstream TNWs, thereby reducing eutrophication. In addition, excess water can be stored temporarily, minimizing potential flooding of downstream areas and 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: None of the wetlands, B, C, H, I, or J, in the review area directly abut an RPW. Wetlands B, C, H, and J have a surface hydrologic connection with SRPW-1 via linear non-jurisdictional drainage features (ditches). WI is in close proximity to Wetland H with indications that since both wetlands extend off-site towards each other, they may actually be the northern and

southern portions of the same wetland. This is discussed in more detail in Section III.B.2. above. As such, WI has an ecological connection with downstream waters as wildlife can move between the wetlands and the SRPW, as well as other wetlands, tributaries, and natural areas in the vicinity. Organisms that typically use these areas include mammals, reptiles, amphibians, and birds. *The DHEC Watershed analysis indicates that the project area is located in HUC#03050206-030, Cow Castle Creek. Downstream of the project site, aquatic life uses are fully supported in Cow Castle Creek. It is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Natural conditions in this stream may have contributed to the observed low dissolved oxygen values.* These wetlands are ecologically important in the upper reaches of this watershed because they protect the quality of downstream waters by filtering out pollutants, sediments, and excess nutrients, etc. from water runoff from adjacent uplands. In addition, excess water can be stored here 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. Wetlands B, C, H, I, and J have a significant nexus to downstream TNWs.

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

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

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

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

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: SRPW-1 is approximately 4 feet wide and 3 feet deep. SRPW-1 has a bed and bank, OHWM, water-stained leaves, and an absence of vegetation in the channel. In addition, SRPW-1 has small trees and saplings growing on the side slopes/banks, therefore, there must be sufficient flow to keep vegetation from growing in the channel while maintaining the depth of the channel so that periodic excavation is not necessary. SRPW-1 connects downstream to Crum Branch which flows to Cow Castle Creek which flows to Four Hole Swamp which is a huge system that crosses Dorchester County and intersects with the Edisto River, a TNW.

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

- Tributary waters: **SRPW-1: 9205 LF / 4' wide;** linear feet width (ft).
  - Other non-wetland waters: acres.
- Identify type(s) of waters: .

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

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

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

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

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

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

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

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



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: **WB: 1.38 ac.; WC: 0.42 ac.; WH: 1.39 ac.; WI: 7.4 ac.; WJ: 10.32 acres.**

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

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

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

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

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

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

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

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

**Identify water body and summarize rationale supporting determination:** \_\_\_\_\_

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): **DF-B is a 617 LF ditch that cuts through upland forest on the north side of Wetland B before tying into SRPW-1. DF-C is a 573 LF ditch that cuts through upland forest before tying into SRPW-1. DF-H is a 2716 LF ditch that cuts through cropland before tying into SRPW-1. DF-J is a 929 LF ditch that cuts through cropland before tying into SRPW-1. Although these drainage features are not jurisdictional in themselves, they provide the hydrologic connections between the subject Wetlands B, C, H, I, and J.**

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).

<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.

- 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: S&ME / Chris Daves.
- 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: Orangeburg.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Orangeburg County Soil Survey / Sheet 49.
- National wetlands inventory map(s). Cite name: Orangeburg/map info.
- State/Local wetland inventory map(s):            .
- FEMA/FIRM maps:            .
- 100-year Floodplain Elevation is:            (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 94:7462084; 99:11203:134; map info 2006.  
or  Other (Name & Date):            .
- Previous determination(s). File no. and date of response letter:            .
- Applicable/supporting case law:            .
- Applicable/supporting scientific literature:            .
- Other information (please specify):            .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The reach discussed on this JD form 2 of 3 consists of a system comprised of 1 seasonal RPW as well as adjacent wetlands. All of the tributaries and wetlands discussed on this form are jurisdictional and subject to regulation by Section 404 of the Clean Water Act. The tributaries are as follows: SRPW-1, Wetland B, Wetland C, Wetland H, Wetland I, and Wetland J. Tributaries and wetlands associatead with Relevant Reach 1 are discussed on Form 1 of 3. In addition, there is one isolated wetland, Wetland A, that is discussed on Form 3 of 3.