

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

Sheet 1 of 3: Relevant Reach 1

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: Four Hole Swamp

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 2 of 3: Relevant Reach 2; Form 3 of 3: isolated.

**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: PRPW-1: 2553 LF; PRPW-2: 1300 LF; PRPW-3: 1290 LF; SRPW-3: 6242 LF; width (ft) and/or

acres.

Wetlands: Total: 34.38 acres. D: 17.48 acres; E: 8.28 acres; F: 0.21 acre; G: 8.41 acres.

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

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup> [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: Drainage Feature (DF)-F is a 566 LF ditch that cuts through upland soils to the north and south of Wetland F before draining into Wetland D which is contiguous with PRPW-3 to the south. DF-F is a man-made ditch, and is representative of

<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.

many of the ditches on this tract that do not exhibit an OHWM or flow. Although not jurisdictional itself, the ditch provides the hydrologic connection between Wetlands F and D which abuts PRPW-3. In addition, there is a 5244 LF conveyance that drains on-site agricultural land. It originates in the northern portion of the site, just south of SRPW-3 (they do not connect in this part of the site). It runs SE down the middle of the site turning to the east and transitioning into PRPW-2 where it enters jurisdictional wetland E on the eastern side of the subject property. The linear conveyance is a manmade ditch and is approximately 6-7 feet deep and 10 feet across. The side slopes are almost vertical, and it is not associated with any wetland or Waters of the U.S. until it intersects with jurisdictional Wetland E on the eastern side of the site.

### **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-3 \*\*\***

**(i) General Area Conditions:**

Watershed size: 210 acres  
Drainage area: 2630 acres  
Average annual rainfall: 48 inches  
Average annual snowfall: <1 inches

**(ii) Physical Characteristics:**

(a) Relationship with TNW:  
 Tributary flows directly into TNW.

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

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: na.

Identify flow route to TNW<sup>5</sup>: SRPW-3 becomes PRPW-3 and flows SE to 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: SRPW-3 is a large tributary that originates off-site to the north of the subject property, and in the upper reaches of the project is approximately 3 feet wide and 2 feet deep with sloped shoulders. It drains off-site properties as well as the agricultural land on-site. No water present at time of site visit and a light layer of water-stained leaves in the bottom. No vegetation growing in bottom. The trib becomes larger as it extends southeast through the site and picks up flow as it intersects with wetland G and Wetland D. At Wetland D, SRPW-3 becomes PRPW-3. The entire length (even upstream of the project site) of the SRPW-3 and PRPW-3 is depicted as a blue-line stream on the quad sheets.

Manipulated (man-altered). Explain: .

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

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

Primary tributary substrate composition (check all that apply):

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: <5%  
 Other. Explain: .

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

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

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 and/or seasonal rainfall.

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

<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.

- sediment deposition
- water staining
- other (list):
- Discontinuous OHWM.<sup>7</sup> Explain: .
- multiple observed or predicted flow events
- abrupt change in plant community

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

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

**(iii) Chemical Characteristics:**

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

Explain: No flow at time of site visit.

Identify specific pollutants, if known: .

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

Riparian corridor. Characteristics (type, average width): SRPW-3: Thick woody vegetation along the channel (app. 30' wide) provides wildlife a corridor in which they can traverse across the agricultural fields to reach the wooded/wetland areas in the south on- and off-site.

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 fringe vegetation along the SRPW provides habitat for insects, amphibians, reptiles, and small mammals.

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

**\*\*\* Wetland F \*\*\***

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

Properties:

Wetland size: 0.21 acres

Wetland type. Explain: Palustrine forested.

Wetland quality. good.

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

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

Flow is: **Intermittent flow**. Explain: related to rainfall events.

Surface flow is: **Discrete and confined**

Characteristics: Drainage feature (DF)-F described in Section II.B.2 above drains flow from Wetland F through Wetland D to PRPW-1.

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: Drainage feature (DF)-F described in Section II.B.2 above drains flow from Wetland F through Wetland D to PRPW-1.

Ecological connection. Explain: .

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.

<sup>7</sup>Ibid.

(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 at time of site visit.

Identify specific pollutants, if known: .

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

Riparian buffer. Characteristics (type, average width): Palustrine, forested. The wetland on average is approximately 230 feet wide.

Vegetation type/percent cover. Explain:Vegetation type varies from forested mature canopy with sapling and herbaceous layers to scrub/shrub recently timbered. Percent cover is >90%.

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings:This forested wetland includes diverse vegetation that may include *Taxodium distichum*, *Liquidambar styraciflua*, *Quercus nigra*, *Rubus spp.*, *Arundinaria gigantea*, *Erianthus giganteus*, *Phytolacca americana*, and *Woodwardia aerolata*. The wetland provides habitat for small and large mammals, resident and migratory bird species, a variety of herptile fauna and insects. The wetland provides a "safe haven" between Wetland G and Wetland D for wildlife to access PRPW-3, as well as other nearby wetlands and tributaries, in addition to providing habitat for all or part of the lives of wildlife using the wetland.

\*\*\*Wetland G\*\*\*

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 8.41 acres

Wetland type. Explain: Palustrine forested.

Wetland quality. good.

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

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: related to rainfall events.

Surface flow is: **Discrete and confined**

Characteristics: SRPW-3, described in III.B.1 above, enters Wetland G at the northern boundary and exits Wetland G to the south where it continues across agricultural land and intersects with Wetland D located south of Wetland G.

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:

Ecological connection. Explain: .

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 at time of site visit.

Identify specific pollutants, if known: .

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

Riparian buffer. Characteristics (type, average width):Palustrine, forested. The wetland on average is ~365 feet wide.

Vegetation type/percent cover. Explain:Vegetation type varies from forested mature canopy with sapling and herbaceous layers to scrub/shrub recently timbered. Percent cover is >90%.

Habitat for:

Federally Listed species. Explain findings: .



- 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: Wetland F (WF) is the only wetland within the review area does not directly abut an RPW. It has a surface hydrologic connection with PRPW-3 via a linear non-jurisdictional drainage feature (ditch) which flows to Wetland D. WF is in close proximity to Wetland D, Wetland G, and PRPW-3 and has an ecological connection with these areas as wildlife can move between the wetlands and the PRPW, 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.* WF is small but ecologically important as a head water wetland because it protects 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. WF has a significant nexus to downstream TNWs.

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

The review area includes SRPW 3, and abutting wetlands D and G. This area includes 9,205 linear feet of SRPW and 25.89 acres of wetlands. As described above, 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.* The SRPW and abutting 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 in these wetlands 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. SRPW- 3 along with abutting wetlands D and G have 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: On the northern end of the site, SRPW -3 is a seasonal RPW as discussed on this Form. This is depicted on the topo/quad sheets as a blue line stream and as it continues south and flows through wetland D, it acquires additional flow forming perennial RPW-3 with OHWM, bed and banks and a sandy bottom. It ultimately drains an ~370 acre area with 34.38 acres of wetlands, and continues off-site as a single unnamed tributary depicted as a blue line stream on the quad/topo sheets (PRPW-1) that flows back on-site before intersecting south of the site with Crum Branch. The lengths of the RPWs are: PRPW-1: 2,553 LF; PRPW-2 = 1300 LF; PRPW-3 =1290 LF.
  - 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-3 is approximately 4 feet wide and 4 feet deep with a bed and bank, OHWM, water-stained leaves, and an absence or small quantity of vegetation in the channel. It connects downstream to PRPW-3 and flows off-site into Crum Branch, to Cow Castle Creek, to Four Hole Swamp, to the Edisto River, a TNW.

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

Tributary waters: **SPRW-3 = 6242 LF, PRPW-1= 2,553 LF, PRPW-2 = 1300 LF, PRPW-3 = 1290 LF**, linear 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: **Wetland D (17.48 acres) is contiguous with and directly abuts both PRPW-3 and -2. Wetland E (8.28 acres) is separated from Wetland D and PRPW-2 by a dirt farm road, but was obviously part of the same wetland system as the soils in both sides of the road are listed as Rains, a hydric soil, and the NWI maps depict both areas as forested wetlands. Early aerials (1994) depict PRPW-2, but the road is not visible. Further, there does not appear to be a change in the topography on either side of the road, so it is expected that subsurface flow continues to move from the wetland to PRPW-2 even though above ground sheet flow would be hindered by the road.**
- 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: **SRPW-3 flows south through the middle of Wetland G, therefore the wetland is directly contiguous and has a surface hydrologic connection with the SRPW where water can flow directly from the wetland to the SRPW.**

Provide acreage estimates for jurisdictional wetlands in the review area: **Wetland D = 17.48 acres; Wetland E = 8.28 acres; Wetland F = 0.21 acres; Wetland G = 8.41 acres.**

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

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

Provide acreage estimates for jurisdictional wetlands in the review area: **Wetland F = 0.21 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>**

<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.



- 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-F is a 566 LF ditch that cuts through upland soils on the north and south side of Wetland F before draining into Wetland D with is contiguous with PRPW-3 to the south. DF-F is a man-made ditch, and is representative of many of the ditches on this tract that do not exhibit OHWM or flow. Although not jurisdictional itself, the ditch provides the hydrologic connection between Wetland F and PRPW-3.

F before draining into Wetland D with is contiguous with PRPW-3 to the south. DF-F is a man-made ditch, and is representative of many of the ditches on this tract that do not exhibit OHWM or flow. Although not jurisdictional itself, the ditch provides the hydrologic connection between Wetland F and PRPW-3.

In addition, there is a 5244 LF conveyance that drains on-site agricultural land. It originates in the northern portion of the site, just south of SRPW-3 (they do not connect in this part of the site). It runs SE down the middle of the site turning to the east and transitioning into PRPW-2 where it enters jurisdictional wetland E on the eastern side of the subject property. The linear conveyance is a manmade ditch and is approximately 6-7 feet deep and 10 feet across. The side slopes are almost vertical, and it is not associated with any wetland or Waters of the U.S. until it intersects with jurisdictional Wetland E on the eastern side of the site.

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

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: 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: .

<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.

- 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 1 of 3 consists of a branched system comprised of seasonal and perennial RPWs as well as abutting and 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-3, P RPW-1, PRPW-2, PRPW-3, Wetland D, Wetland E, Wetland F, and Wetland G. The remainder of the tributaries, wetlands and non-jurisdictional wetlands and waters not discussed on this form are discussed on Form 2 of 3.