# 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

REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): May 28, 2015 A.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 1 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: Newberry City: Prosperity Center coordinates of site (lat/long in degree decimal format): Lat. 34.239829° N, Long. 81.473983° W. Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 1 = 2.670.61 linear feet: 7 width (ft) and/or 0.43 acres. Wetlands: Wetland A = 0.88 acres, Wetland B = 0.68 acres, Wetland C = 0.01 acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., 1987 Delineation Manual, Pick List Elevation of established OHWM (if known):
- Non-regulated waters/wetlands (check if applicable):<sup>3</sup> 2.

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

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

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

### SECTION III: CWA ANALYSIS

## A. TNWs AND WETLANDS ADJACENT TO TNWs

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

## 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	l: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Natural         Image: Imag
	Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:
	Surface flow is: <b>Pick List.</b> Characteristics:
	Subsurface flow: <b>Pick List</b> . 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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii) Ch	emical Characteristics:

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

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

# (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

# (ii) Chemical Characteristics:

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

identify specific politicality, if known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Stream 1 is a first order stream with a drainage area of approximately 93 acres. The tributary is

depicted as a dashed blue line on the USGS topographic map and as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, leaf litter washed away, sediment deposition, water staining, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.

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):

acres.

Tributary waters: 2,670.61 linear feet 7 width (ft).

Other non-wetland waters:

Identify type(s) of waters:

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

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:

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

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

- $\bowtie$ 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: There is a continuous hydrologic surface connection between Wetlands A, B and C and Stream 1.
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Wetland A = 0.88 acres, Wetland B = 0.68 acres, Wetland C = 0.01 acres.

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

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

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

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

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.

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

- 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>

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

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

	<ul> <li>which are or could be used by interstate or foreign travelers for recreational or other purposes.</li> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> <li>Other factors. Explain:</li> </ul>			
	Identify water body and summarize rationale supporting determination:			
	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres.</li> <li>Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>			
F.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>			
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.			
	<ul> <li>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):</li> <li>Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).</li> <li>Lakes/ponds: acres.</li> <li>Other non-wetland waters: acres. List type of aquatic resource: .</li> <li>Wetlands: acres.</li> </ul>			
<u>SE(</u>	TION IV: DATA SOURCES.			
А.	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> </ul>			
	<ul> <li>□ Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>☑ U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>□ USGS NHD data.</li> <li>☑ USGS 8 and 12 digit HUC maps.</li> </ul>			
	<ul> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: 1:24,000, Little Mountain.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> <li>National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.</li> <li>State/Local wetland inventory map(s):</li> <li>FEMA/FIRM maps:</li> <li>100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)</li> </ul>			
	<ul> <li>Photographs: Aerial (Name &amp; Date): 11212:26, 1999 and 2006. or Other (Name &amp; Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.</li> </ul>			

Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.

<sup>&</sup>lt;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*.



Applicable/supporting case law:

Applicable/supporting scientific literature:

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Other information (please specify): Site visit March 19, 2013.
 U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01.
 South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad

River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of perennial RPW tributary labeled as "Stream 1" on the delineation depiction and abutting Wetlands A, B and C. Perennial RPWs and their abutting wetlands are jurisdictional according to RGL 07-01. Therefore, Stream 1, Wetland A, Wetland B, and Wetland C are waters of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 2 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: NewberryCity: ProsperityCenter coordinates of site (lat/long in degree decimal format):Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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. <u>REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):</u>

Office (Desk) Determination. Date: May 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 1A = 5,343.76 linear feet: 7 width (ft) and/or 0.86 acres. Wetlands: Wetland E = 0.12 acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., 1987 Delineation Manual, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>

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

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

### SECTION III: CWA ANALYSIS

## A. TNWs AND WETLANDS ADJACENT TO TNWs

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

## 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	l: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Natural         Image: Imag
	Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:
	Surface flow is: <b>Pick List.</b> Characteristics:
	Subsurface flow: <b>Pick List</b> . 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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii) Ch	emical Characteristics:

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

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

# (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

# (ii) Chemical Characteristics:

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

identify specific politicality, if known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Stream 1A is a second order stream with a drainage area of approximately 516 acres. The

tributary is depicted as a dashed blue line on the USGS topographic map and as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, leaf litter washed away, sediment deposition, water staining, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.

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):

acres.

Tributary waters: 5,343.76 linear feet 7 width (ft).

Other non-wetland waters:

Identify type(s) of waters:

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

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:

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

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

- Ketlands 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: There is a continuous hydrologic surface connection between Wetland E and Stream 1A.
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Wetland  $\mathbf{E} = 0.12$  acres.

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

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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

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

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

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

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

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

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

Demonstrate that impoundment was created from "waters of the U.S.," or

Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

Demonstrate that water is isolated with a nexus to commerce (see E below).

**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>

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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.

	<ul> <li>which are or could be used by interstate or foreign travelers for recreational or other purposes.</li> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> <li>Other factors. Explain:</li> </ul>
	Identify water body and summarize rationale supporting determination:
	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
F.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.
	<ul> <li>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):</li> <li>Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).</li> <li>Lakes/ponds: acres.</li> <li>Other non-wetland waters: acres. List type of aquatic resource: .</li> <li>Wetlands: acres.</li> </ul>
<u>SEC</u>	CTION IV: DATA SOURCES.
<b>A.</b>	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: 1:24,000, Little Mountain.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> <li>National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.</li> </ul>
	<ul> <li>State/Local wetland inventory map(s): .</li> <li>FEMA/FIRM maps: .</li> <li>100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)</li> <li>Photographs: Aerial (Name &amp; Date): 11212:26, 1999 and 2006. or Other (Name &amp; Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November</li> </ul>
	<ul> <li>28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.</li> <li>Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.</li> <li>Applicable/supporting case law:</li> <li>Applicable/supporting scientific literature:</li> <li>Other information (please specify): Site visit March 19, 2013.</li> </ul>

U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01.

South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of perennial RPW tributary labeled as "Stream 1A" on the delineation depiction and abutting Wetland E. Perennial RPWs and their abutting wetlands are jurisdictional according to RGL 07-01. Therefore, Stream 1A and Wetland E are waters of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 3 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: NewberryCity: ProsperityCenter coordinates of site (lat/long in degree decimal format):Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 2 = 920.28 linear feet: 4 width (ft) and/or 0.08 acres. Wetlands: acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>
  - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: A feature was reviewed that had been previously determined to be a jurisdicitonal wetland referenced as

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

"Wetland D" in the 2008 jurisdictional determination for this site. This feature was evaluated and determined not to be a wetland due to a lack of hydric soils.

#### SECTION III: CWA ANALYSIS

## A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
  - (i) General Area Conditions:
    - Watershed size: **146,192** acres ; HUC 03050106-04 Drainage area: **57** acres Average annual rainfall: **46.52** inches Average annual snowfall: **2.1** inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 ☐ Tributary flows directly into TNW.
 ☑ Tributary flows through 2 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 2-5 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: They do not.

<sup>&</sup>lt;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> : Stream 2 flows into Stream 1A (form 2 of 13), which flows into Stream 10A (form 13
	of 13), which flows into Cannons Creek, a TNW.
	Tributary stream order, if known: <b>first</b> .
(b)	General Tributary Characteristics (check all that apply):         Tributary is:
	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: Moderately stable. Presence of run/riffle/pool complexes. Explain: <b>Not observed</b> . Tributary geometry: <b>Meandering.</b> Tributary gradient (approximate average slope): <b>2-5</b> %
	<u>Flow:</u> Tributary provides for: <b>Seasonal flow</b> Estimate average number of flow events in review area/year: <b>6-10</b> Describe flow regime: <b>The contributions of drainage area and ground water provide seasonal base flow in the</b>
tributary.	Other information on duration and volume:
	Surface flow is: <b>Discrete and confined</b> . Characteristics: <b>Flow is confined to the channel for the majority of the</b> there is continuous bed and bank, approximately 800 linear feet. A portion of the reach, approximately 120 feet, inuous ordinary high water mark, where overland sheet flow occurs.
	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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list):
ordinary high	⊠ Discontinuous OHWM. <sup>7</sup> Explain: A portion of the reach, approximately 120 feet, has a discontinuous a water mark, where overland sheet flow occurs. Bed and bank and OHWM were observed immediately
	nd downgradient of the area of the discontinuous OHWM.
	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/characteristics         tidal gauges       vegetation lines/changes in vegetation types.

other (list):

<sup>&</sup>lt;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: **During the site visit, the water was mainly clear, but had some suspended sediment from disturbed land** within the drainage area and recent rainfall. The land use/land cover in the watershed includes: 65.3% forested land, 18.1% agricultural land, 4.7% urban land, 2.7% forested wetland, 7.1% water, 1.4% barren land, and 0.7% scrub/shrub land.

Identify specific pollutants, if known: sediment.

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

- Riparian corridor. Characteristics (type, average width): forested, approximately 25 feet minimum width.
  - Wetland fringe. Characteristics:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
- Aquatic/wildlife diversity. Explain findings: The tributary provides topographic and hydrologic changes in the landscape that support a variety of wildlife and species diversity.
  - 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

## (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
  - Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain:

Surface flow is: **Pick List** Characteristics:

Subsurface flow: **Pick List**. Explain findings: Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting
 Not directly abutting

- Discrete wetland hydrologic connection. Explain:
- Ecological connection. Explain:
- Separated by berm/barrier. Explain:
- (d) <u>Proximity (Relationship) to TNW</u>
  - Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List**. Estimate approximate location of wetland as within the **Pick List** floodplain.

#### (ii) Chemical Characteristics:

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

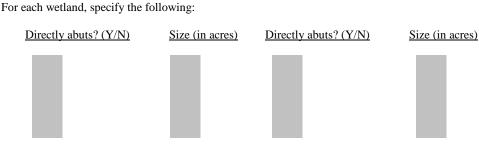
#### (iii) Biological Characteristics. Wetland supports (check all that apply):

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

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

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

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



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs: Stream 2 enhances a variety of wildlife species by providing topographic and hydrologic changes in the landscape. The tributary transports water and sediment from adjacent uplands to the TNW (Cannons Creek). The tributary transfers nutrients and organic carbon that support downstream foodwebs. Monitoring performed by the South Carolina Department of Health and Environmental Control (SCDHEC) on Cannons Creek indicates that aquatic life uses are fully supported. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of Cannons Creek, this office has determined that there is a Significant Nexus between the review area relevant reach and the downstream TNW.
- D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

- 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:
  - **X** 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: **Stream 2 is a first order stream with a drainage area of approximately 57 acres.** The tributary is not shown on the USGS topographic map; however, the topographic contours signature indicates topography conducive to the formation of a stream. The tributary is depicted as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, approximately 800 linear feet of continuous bed and bank, and approximately 120 feet of discontinuous ordinary high water mark. The majority of the tributary has an OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, leaf litter disturbed or washed away, sediment deposition, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate seasonal flow.

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

acres.

- Tributary waters: **920.28** linear feet **4** width (ft).
- Other non-wetland waters:

Identify type(s) of waters:

- 3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.
  - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

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

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

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

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

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

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

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

- 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
  - Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

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

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

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

Demonstrate that water is isolated with a nexus to commerce (see E below).

#### <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.

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:
	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above): A feature was reviewed that had been previously determined to be a jurisdicitonal land referenced as "Wetland D" in the 2008 jurisdictional determination for this site. This feature was evaluated and determined to be a wetland due to a lack of hydric soils.</li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.
SEC	CTION IV: DATA SOURCES.
<b>A.</b> ;	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: 1:24,000, Little Mountain.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> </ul>

<sup>&</sup>lt;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*.

National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.  $\boxtimes$ State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)  $\overline{\boxtimes}$ Photographs: Aerial (Name & Date): **11212:26, 1999 and 2006**. or 🔀 Other (Name & Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.  $\boxtimes$ Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008. Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify): Site visit March 19, 2013. U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01. South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of a seasonal RPW tributary labeled as "Stream 2" on the delineation depiction. Seasonal RPWs are jurisdictional according to RGL 07-01; however, Significant Nexus findings for the record are included for Stream 2, as required by Rapanos Guidance. Therefore, Stream 2 is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 4 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: Newberry<br/>Center coordinates of site (lat/long in degree decimal format): Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83City: Prosperity

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 3 = 1,170.34 linear feet: 4 width (ft) and/or 0.11 acres. Wetlands: acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>
  - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: A linear feature was reviewed that had been previously determined to be a jurisdictional tributary referenced as "Stream 8" in the 2008 jurisdictional determination for this site. This feature was evaluated and determined not to

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

be a tributary or a wetland. This feature lacked a continuous bed and bank, lacked ordinary high water mark indicators, lacked hydric soils, did not appear to carry a relatively permanent flow of water, and appeared to only drain uplands during heavy rain events.

# SECTION III: CWA ANALYSIS

# A. TNWs AND WETLANDS ADJACENT TO TNWs

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

# 1. TNW

Identify TNW:

Summarize rationale supporting determination:

# 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
  - (i) General Area Conditions:

Watershed size: **146,192** acres ; **HUC 03050106-04** Drainage area: **67** acres Average annual rainfall: **46.52** inches Average annual snowfall: **2.1** inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 ☐ Tributary flows directly into TNW.
 ☑ Tributary flows through 2 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 2-5 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: They do not.

<sup>&</sup>lt;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> : <b>Stream 3 flows into Stream 1A (form 2 of 13), which flows into Stream 10A (form 13 of 13), which flows into Cannons Creek, a TNW</b> . Tributary stream order, if known: <b>first</b> .
	(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):       Concrete         Silts       Sands       Concrete         Cobbles       Gravel       Muck         Bedrock       Vegetation. Type/% cover:       Huck         Other. Explain:       .
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Moderately stable. Presence of run/riffle/pool complexes. Explain: <b>Not observed</b> . Tributary geometry: <b>Meandering.</b> Tributary gradient (approximate average slope): <b>5</b> %
		<u>Flow:</u> Tributary provides for: <b>Seasonal flow</b> Estimate average number of flow events in review area/year: <b>2-5</b> Describe flow regime: <b>The contributions of drainage area and ground water provide seasonal base flow in the</b>
tributary	7.	Other information on duration and volume:
		Surface flow is: Discrete and confined. Characteristics: Flow is confined to the channel.
		Subsurface flow: Unknown. Explain findings: .
		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       □         □       clear, natural line impressed on the bank       □         □       clear, natural line impressed on the bank       □         □       clear, natural line impressed on the bank       □         □       clear, natural line impressed on the bank       □         □       clear, natural line impressed on the bank       □         □       clear, natural line impressed on the bank       □         □       clear, natural line impressed on the bank       □         □       shelving       □       the presence of litter and debris         □       shelving       □       the presence of wrack line         □       sediment debris or absent       □       sediment sorting         □       leaf litter disturbed or washed away       □       scour         □       sediment deposition       □       abrupt change in plant community         □       other (list):       □       biscontinuous OHWM. <sup>7</sup> Explain:
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii)	Che	mical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: **During the site visit, the water was clear. Historical surrounding land uses were agricultural and** 

<sup>&</sup>lt;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.

silvicultural. The land use/land cover in the watershed includes: 65.3% forested land, 18.1% agricultural land, 4.7% urban land, 2.7% forested wetland, 7.1% water, 1.4% barren land, and 0.7% scrub/shrub land. Identify specific pollutants, if known: sediment.

- (iv) Biological Characteristics. Channel supports (check all that apply):
- Riparian corridor. Characteristics (type, average width): forested, greater than 100 feet wide.
   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 tributary provides topographic and hydrologic changes in the

# landscape that support a variety of wildlife and species diversity.

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

#### (i) Physical Characteristics:

- General Wetland Characteristics: (a)
  - Properties:

Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW: Flow is: **Pick List**. Explain:

> Surface flow is: Pick List Characteristics:

Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:

# (c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

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

## (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the **Pick List** floodplain.

## (ii) Chemical Characteristics:

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

Identify specific pollutants, if known:

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

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

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

All wetland(s) being considered in the cumulative analysis: Pick List Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs: Stream 3 enhances a variety of wildlife species by providing topographic and hydrologic changes in the landscape. The tributary transports water and sediment from adjacent uplands to the TNW (Cannons Creek). The tributary transfers nutrients and organic carbon that support downstream foodwebs. Monitoring performed by the South Carolina Department of Health and Environmental Control (SCDHEC) on Cannons Creek indicates that aquatic life uses are fully supported. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of Cannons Creek, this office has determined that there is a Significant Nexus between the review area relevant reach and the downstream TNW.

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

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

TNWs		width (ft), Or,	acres.
Wetlan	nds adjacent to TNWs:	acres.	

# 2. <u>RPWs that flow directly or indirectly into TNWs.</u>

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: Stream 3 is a first order stream with a drainage area of approximately 67 acres. The tributary is not shown on the USGS topographic map; however, the topographic contours signature indicates topography conducive to the formation of a stream. The tributary is not depicted on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and an OHWM with a natural line impressed on the bank, changes in the character of the soil, vegetation absent, sediment deposition, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate seasonal flow.

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

acres.

- Tributary waters: **1,170.34** linear feet **4** width (ft).
- Other non-wetland waters:

Identify type(s) of waters:

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

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):

acres.

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

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

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

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

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

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

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

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

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

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

- 7. Impoundments of jurisdictional waters.<sup>9</sup>
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
    - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
  - Demonstrate that water is isolated with a nexus to commerce (see  $\dot{E}$  below).

Explain:

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

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.
	<ul> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> </ul>
	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.
and ind	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above): A linear feature was reviewed that had been previously determined to be a isdicitonal tributary referenced as "Stream 8" in the 2008 jurisdictional determination for this site. This feature was evaluated determined not to be a tributary or a wetland. This feature lacked a continuous bed and bank, lacked ordinary high water markicators, lacked hydric soils, did not appear to carry a relatively permanent flow of water, and appeared to only drain uplands ring heavy rain events.</li> </ul>
	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).
	<ul> <li>Lakes/ponds: acres.</li> <li>Other non-wetland waters: acres. List type of aquatic resource: .</li> <li>Wetlands: acres.</li> </ul>
	<ul> <li>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):</li> <li>Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).</li> <li>Lakes/ponds: acres.</li> <li>Other non-wetland waters: acres. List type of aquatic resource: .</li> <li>Wetlands: acres.</li> </ul>
<u>SE</u>	CTION IV: DATA SOURCES.
А.	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, Inc Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps:

- Corps navigable waters' study: **1977**.  $\boxtimes$ 
  - U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.
    - ☐ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps.
  - U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000, Little Mountain.
  - USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.

 $\mathbb{X}$ National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.

<sup>&</sup>lt;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.

State/Local wetland inventory map(s):
FEMA/FIRM maps:
100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
Photographs: 🖾 Aerial (Name & Date): <b>11212:26, 1999 and 2006</b> .
or 🔀 Other (Name & Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November
, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.
Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.
Applicable/supporting case law:
Applicable/supporting scientific literature:
Other information (please specify): Site visit March 19, 2013.
U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01.
South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad
River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

B. ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of a seasonal RPW tributary labeled as "Stream 3" on the delineation depiction. Seasonal RPWs are jurisdictional according to RGL 07-01; however, Significant Nexus findings for the record are included for Stream 3, as required by Rapanos Guidance. Therefore, Stream 3 is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 5 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: NewberryCity: ProsperityCenter coordinates of site (lat/long in degree decimal format):Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 4 = 230.93 linear feet: 3 width (ft) and/or 0.02 acres. Wetlands: acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>

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

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

## SECTION III: CWA ANALYSIS

## A. TNWs AND WETLANDS ADJACENT TO TNWs

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

# 1. TNW

Identify TNW:

Summarize rationale supporting determination:

## 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

 (i) General Area Conditions: Watershed size: 146,192 acres; HUC 03050106-04 Drainage area: 15 acres Average annual rainfall: 46.52 inches Average annual snowfall: 2.1 inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 ☐ Tributary flows directly into TNW.
 ☑ Tributary flows through 2 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 2-5 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: They do not.

Identify flow route to TNW<sup>5</sup>: **Stream 4 flows into Stream 1A (form 2 of 13), which flows into Stream 10A (form 13 of 13), which flows into Cannons Creek, a TNW**. Tributary stream order, if known: **first**.

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Artificial (man-made). Explain:         Image: Image: Artificial (man-made). Explain:       Image: Artificial (man-made). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 1 feet Average side slopes: 2:1.
	Primary tributary substrate composition (check all that apply):       Image: Concrete in the concrete
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Moderately stable. Presence of run/riffle/pool complexes. Explain: <b>Not observed</b> . Tributary geometry: <b>Relatively straight.</b> Tributary gradient (approximate average slope): <b>5-8</b> %
(c) tributary.	<u>Flow:</u> Tributary provides for: <b>Seasonal flow</b> Estimate average number of flow events in review area/year: <b>11-20</b> Describe flow regime: <b>The contributions of drainage area and ground water provide seasonal base flow in the</b>
citotuliy.	Other information on duration and volume:
	Surface flow is: <b>Discrete and confined.</b> Characteristics: <b>Flow is confined to the channel</b> .
	Subsurface flow: Unknown. Explain findings:
	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         □       □         □       clear, natural line impressed on the bank         □       □         □       changes in the character of soil         □       □         □       shelving         □       the presence of itter and debris         □       bestruction of terrestrial vegetation         □       the presence of wrack line         □       sediment down, bent, or absent         □       leaf litter disturbed or washed away         □       sediment deposition         □       water staining         □       water staining         □       biscontinuous OHWM. <sup>7</sup> Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Historical surrounding land uses were agricultural and silvicultural. The land use/land cover in the watershed includes: 65.3% forested land, 18.1% agricultural land, 4.7% urban land, 2.7% forested wetland,

7.1% water, 1.4% barren land, and 0.7% scrub/shrub land.

Identify specific pollutants, if known: sediment.

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

- Riparian corridor. Characteristics (type, average width): forested, greater than 100 feet wide.
- 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 tributary provides topographic and hydrologic changes in the landscape that support a variety of wildlife and species diversity.

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

- (i) Physical Characteristics:
  - (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
  - (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain:

Surface flow is: **Pick List** Characteristics:

Subsurface flow: **Pick List**. Explain findings: Dye (or other) test performed:

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
  - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:
- (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Flow is from: **Pick List**.
Estimate approximate location of wetland as within the **Pick List** floodplain.

#### (ii) Chemical Characteristics:

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

Identify specific pollutants, if known:

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs: Stream 4 enhances a variety of wildlife species by providing topographic and hydrologic changes in the landscape. The tributary transports water and sediment from adjacent uplands to the TNW (Cannons Creek). The tributary transfers nutrients and organic carbon that support downstream foodwebs. Monitoring performed by the South Carolina Department of Health and Environmental Control (SCDHEC) on Cannons Creek indicates that aquatic life uses are fully supported. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of Cannons Creek, this office has determined that there is a Significant Nexus between the review area relevant reach and the downstream TNW.

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

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

TNWs		width (ft), Or,	acres.
Wetlan	nds 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: Stream 4 is a first order stream with a drainage area of approximately 15 acres. The tributary is not shown on the USGS topographic map; however, the topographic contours signature indicates topography conducive to the formation of a stream. The tributary is depicted as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and an OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, sediment deposition, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate seasonal flow.

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

- Tributary waters: 230.93 linear feet 3 width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters:

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

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):

acres.

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

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

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

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

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

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

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

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

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

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

- 7. Impoundments of jurisdictional waters.<sup>9</sup>
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
    - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
  - Demonstrate that water is isolated with a nexus to commerce (see  $\dot{E}$  below).

Explain:

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

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:
<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>
Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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):           Image: Non-wetland waters (i.e., rivers, streams):         linear feet, width (ft).           Image: Lakes/ponds:         acres.           Image: Other non-wetland waters:         acres. List type of aquatic resource:           Image: Wetlands:         acres.
CTION IV: DATA SOURCES.
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, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         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:         Corps navigable waters' study:       1977.         U.S. Geological Survey Hydrologic Atlas:       HA 730-G, 1990.         USGS NHD data.       USGS 8 and 12 digit HUC maps.         U.S. Geological Survey map(s). Cite scale & quad name:       1:24,000, Little Mountain.         USDA Natural Resources Conservation Service Soil Survey. Citation:       Newberry County pages 35 and 43.         National wetlands inventory map(s). Cite name:       U42P, U21, PFO1B, PSS1/3B.         State/Local wetland inventory map(s):       FEMA/FIRM maps:         100-year Floodplain Elevation is:       (National Geodectic Vertical Datum of 1929)

□100-year Floodplain Elevation is:(National Geodectic Vertical)☑Photographs: ☑ Aerial (Name & Date):11212:26, 1999 and 2006.

<sup>&</sup>lt;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*.

or 🔀 Other (Name & Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.

- Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.  $\boxtimes$ 
  - Applicable/supporting case law:
- Applicable/supporting scientific literature:
  - Other information (please specify): Site visit March 19, 2013.

U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01. South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

B. ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of a seasonal RPW tributary labeled as "Stream 4" on the delineation depiction. Seasonal RPWs are jurisdictional according to RGL 07-01; however, Significant Nexus findings for the record are included for Stream 4, as required by Rapanos Guidance. Therefore, Stream 4 is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 6 of 13.

## C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: NewberryCity: ProsperityCenter coordinates of site (lat/long in degree decimal format):Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 5 = 236.5 linear feet: 4 width (ft) and/or 0.02 acres. Wetlands: acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>
  - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: A feature was reviewed that had been previously determined to be a jurisdicitonal wetland referenced as

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

"Wetland F" in the 2008 jurisdictional determination for this site. This feature was evaluated and determined not to be a wetland due to a lack of hydric soils and a lack of hydrology indicators.

#### SECTION III: CWA ANALYSIS

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

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

1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
  - (i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	ll: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>
 ☐ Tributary flows directly into TNW.
 ☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are<br/>Project waters arePick List<br/>Pick List<br/>river miles from RPW.Project waters are<br/>Project waters arePick List<br/>Pick List<br/>aerial (straight) miles from TNW.Project waters are<br/>Project waters cross or serve as state boundaries. Explain:

<sup>&</sup>lt;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> : . Tributary stream order, if known: .
(b)	General Tributary Characteristics (check all that apply):         Tributary is: <ul> <li>Natural</li> <li>Artificial (man-made). Explain:</li> <li>Manipulated (man-altered). Explain:</li> </ul>
	Tributary properties with respect to top of bank (estimate):         Average width:       feet         Average depth:       feet         Average side slopes:       Pick List.
	Primary tributary substrate composition (check all that apply):       Silts       Concrete         Cobbles       Gravel       Muck         Bedrock       Vegetation. Type/% cover:       Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	Flow:         Tributary provides for:       Pick List         Estimate average number of flow events in review area/year:       Pick List         Describe flow regime:       .         Other information on duration and volume:       .
	Surface flow is: <b>Pick List.</b> Characteristics: . Subsurface flow: <b>Pick List</b> . 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):       the presence of litter and debris         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):       .
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
Che	mical Characteristics:

# (iii)

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

Identify specific pollutants, if known:

<sup>&</sup>lt;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.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

### (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

### (ii) Chemical Characteristics:

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

identify specific politicality, it known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Stream 5 is a first order stream with a drainage area of approximately 7 acres. The tributary is

depicted as a dashed blue line on the USGS topographic map and as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, leaf litter washed away, sediment deposition, water staining, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.

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):

acres.

Tributary waters: 236.5 linear feet 4 width (ft).

Other non-wetland waters:

Identify type(s) of waters: .

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

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):

acres.

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

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

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

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

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

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

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

- 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
  - Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

- 7. Impoundments of jurisdictional waters.<sup>9</sup>
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
    - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
    - Demonstrate that water is isolated with a nexus to commerce (see E below).

**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>

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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*.

	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:
Ide	ntify water body and summarize rationale supporting determination:
	vide 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.
⊠ □ ₩ wetland	<ul> <li>N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above): A feature was reviewed that had been previously determined to be a jurisdicitonal referenced as "Wetland F" in the 2008 jurisdictional determination for this site. This feature was evaluated and determined e a wetland due to a lack of hydric soils and a lack of hydrology indicators.</li> </ul>
fact	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (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.
	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such nding 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.
<u>SECTIO</u>	<u>DN IV: DATA SOURCES</u> .
A. SUP	PORTING 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, Inc Data sheets prepared/submitted by or on behalf of the applicant/consultant. ☐ Office concurs with data sheets/delineation report. ☐ Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: 1977. U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990. ☐ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000, Little Mountain. USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43. National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B. State/Local wetland inventory map(s): FEMA/FIRM maps:
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): <b>11212:26, 1999 and 2006</b> . See State of the second
28, ⊠ □	or Other (Name & Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013. Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008. Applicable/supporting case law: Applicable/supporting scientific literature:

Other information (please specify): Site visit March 19, 2013.
 U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01.
 South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents a perennial RPW tributary labeled as "Stream 5" on the delineation depiction. Perennial RPWs are jurisdictional according to RGL 07-01. Therefore, Stream 5 is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 7 of 13.

## C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: Newberry<br/>Center coordinates of site (lat/long in degree decimal format): Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83City: Prosperity

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 5A = 58.4 linear feet: 3 width (ft) and/or 0.004 acres. Wetlands: acres.
- **c.** Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>

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

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

#### SECTION III: CWA ANALYSIS

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

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

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	l: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Natural imag
	Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:
	Surface flow is: <b>Pick List.</b> Characteristics:
	Subsurface flow: <b>Pick List</b> . 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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii) Ch	emical Characteristics:

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

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

### (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

### (ii) Chemical Characteristics:

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

identify specific politicality, it known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Stream 5A is a first order stream with a drainage area of approximately 47 acres. The tributary

is not depicted on the USGS topographic map or on the USDA NRCS soil survey. This tributary has a well-defined	
channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character	of
the soil, shelving, vegetation absent, leaf litter washed away, sediment deposition, water staining, destruction of	
terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.	

- 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):

acres.

- Tributary waters: **58.4** linear feet **3** width (ft).
  - Other non-wetland waters:

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:	linea	r feet	width (ft).
Other non-wetland w	vaters:	acres.	

Identify type(s) of waters:

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

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

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

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

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

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

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

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

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

**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.

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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*.

	<ul> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> <li>Other factors. Explain:</li> </ul>
	Identify water body and summarize rationale supporting determination:
	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
F.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.
	<ul> <li>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):</li> <li>Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).</li> <li>Lakes/ponds: acres.</li> <li>Other non-wetland waters: acres. List type of aquatic resource: .</li> <li>Wetlands: acres.</li> </ul>
<u>SE</u>	CTION IV: DATA SOURCES.
<b>A</b> .	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: 1:24,000, Little Mountain.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> <li>National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.</li> </ul>
	<ul> <li>State/Local wetland inventory map(s): Cite name: C421, C21, TFOID, TSOTSD.</li> <li>State/Local wetland inventory map(s): .</li> <li>FEMA/FIRM maps: .</li> <li>100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)</li> <li>Photographs: Aerial (Name &amp; Date): 11212:26, 1999 and 2006. or          Other (Name &amp; Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November</li> </ul>
	<ul> <li>28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.</li> <li>Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.</li> <li>Applicable/supporting case law:</li> <li>Applicable/supporting scientific literature:</li> <li>Other information (please specify): Site visit March 19, 2013.</li> </ul>

U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01.

South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents a perennial RPW tributary labeled as "Stream 5A" on the delineation depiction. Perennial RPWs are jurisdictional according to RGL 07-01. Therefore, Stream 5A is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 8 of 13.

## C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: NewberryCity: ProsperityCenter coordinates of site (lat/long in degree decimal format):Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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. <u>REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):</u>

Office (Desk) Determination. Date: May 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 5B = 677.61 linear feet: 4 width (ft) and/or 0.06 acres. Wetlands: Wetland I = 0.08 acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., 1987 Delineation Manual, Pick List Elevation of established OHWM (if known):
- 2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>
  - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Two features were reviewed that had been previously determined to be jurisdicitonal wetlands referenced as "Wetland G" and "Wetland H" in the 2008 jurisdictional determination for this site. The area previously referenced

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

as Wetland G has become channelized and is now a portion of Stream 5B. The area previously referenced as Wetland H was evaluated and determined not to be a wetland due to a lack of hydric soils and a lack of hydrology indicators.

#### SECTION III: CWA ANALYSIS

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

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

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
  - (i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	l: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>
 ☐ Tributary flows directly into TNW.
 ☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

<sup>&</sup>lt;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> : . Tributary stream order, if known: .
(b)	General Tributary Characteristics (check all that apply):         Tributary is: <ul> <li>Natural</li> <li>Artificial (man-made). Explain:</li> <li>Manipulated (man-altered). Explain:</li> </ul>
	Tributary properties with respect to top of bank (estimate):         Average width:       feet         Average depth:       feet         Average side slopes:       Pick List.
	Primary tributary substrate composition (check all that apply):       Silts       Concrete         Cobbles       Gravel       Muck         Bedrock       Vegetation. Type/% cover:       Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	Flow:         Tributary provides for:       Pick List         Estimate average number of flow events in review area/year:       Pick List         Describe flow regime:       .         Other information on duration and volume:       .
	Surface flow is: <b>Pick List.</b> Characteristics: . Subsurface flow: <b>Pick List</b> . 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):       the presence of litter and debris         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):       .
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
Che	mical Characteristics:

# (iii)

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

Identify specific pollutants, if known:

<sup>&</sup>lt;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.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

### (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

### (ii) Chemical Characteristics:

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

identify specific politicality, it known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. **<u>RPWs</u>** 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: Stream 5B is a second order stream with a drainage area of approximately 94 acres. The

tributary is depicted as a dashed blue line on the USGS topographic map and as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character of the soil, vegetation absent, leaf litter washed away, sediment deposition, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.

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):

acres.

Tributary waters: 677.61 linear feet 4 width (ft).

Other non-wetland waters:

Identify type(s) of waters:

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

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:

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

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

- Ketlands 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: There is a continuous hydrologic surface connection between Wetland I and Stream 5B.
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Wetland I = 0.08 acres.

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

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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

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

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

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

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

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

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

Demonstrate that impoundment was created from "waters of the U.S.," or

Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

Demonstrate that water is isolated with a nexus to commerce (see E below).

**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>

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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.

	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:
Ide	ntify water body and summarize rationale supporting determination:
	vide 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.
wetlands reference	<ul> <li>N-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): Two features were reviewed that had been previously determined to be jurisdicitonal s referenced as "Wetland G" and "Wetland H" in the 2008 jurisdictional determination for this site. The area previously referenced as Wetland G has become channelized and is now a portion of Stream 5B. The area previously referenced as Wetland H luated and determined not to be a wetland due to a lack of hydric soils and a lack of hydrology indicators.</li></ul>
fact	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR tors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (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.
	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such nding 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.
<u>SECTIO</u>	DN IV: DATA SOURCES.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below):         Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared/submitted by or on behalf of the applicant/consultant:       S&ME, Inc         Data sheets prepared by the Corps:       Corps navigable waters' study: 1977.         U.S. Geological Survey Hydrologic Atlas:       HA 730-G, 1990.         U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000, Little Mountain.       USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.
	<ul> <li>100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)</li> <li>Photographs: Aerial (Name &amp; Date): 11212:26, 1999 and 2006. or Other (Name &amp; Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.</li> <li>Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008. Applicable/supporting case law:</li> </ul>



Applicable/supporting scientific literature:

Other information (please specify): Site visit March 19, 2013. U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01. South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of perennial RPW tributary labeled as "Stream 5B" on the delineation depiction and abutting Wetland I. Perennial RPWs and their abutting wetlands are jurisdictional according to RGL 07-01. Therefore, Stream 5B and Wetland I are waters of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 9 of 13.

## C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: Newberry<br/>Center coordinates of site (lat/long in degree decimal format): Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83City: Prosperity

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 5C = 34.9 linear feet: 3 width (ft) and/or 0.002 acres. Wetlands: acres.
- **c.** Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>

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

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

#### SECTION III: CWA ANALYSIS

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

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

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	l: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Natural         Artificial (man-made). Explain:       .         Manipulated (man-altered). Explain:       .
	Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:
	Surface flow is: <b>Pick List.</b> Characteristics:
	Subsurface flow: <b>Pick List</b> . Explain findings:
	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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii) Che	emical Characteristics:

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

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

### (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

### (ii) Chemical Characteristics:

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

identify specific politicality, it known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

## C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Stream 5C is a first order stream with a drainage area of approximately 2 acres. The tributary is

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: **34.9** linear feet **3** width (ft).
  - Other non-wetland waters: acres.
    - Identify type(s) of waters:

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

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

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

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:

width (ft).

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.

- Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. 5.
  - 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

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

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

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).

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>

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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.

	<ul> <li>which are or could be used by interstate or foreign travelers for recreational or other purposes.</li> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> <li>Other factors. Explain:</li> </ul>
	Identify water body and summarize rationale supporting determination:
	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
F.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:         <ul> <li>Other: (explain, if not covered above):</li> <li>.</li> </ul> </li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.
	<ul> <li>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):</li> <li>Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).</li> <li>Lakes/ponds: acres.</li> <li>Other non-wetland waters: acres. List type of aquatic resource: .</li> <li>Wetlands: acres.</li> </ul>
<u>SE</u>	CTION IV: DATA SOURCES.
Α.	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: 1:24,000, Little Mountain.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> <li>National wetlands inventory map(s).</li> <li>FEMA/FIRM maps:</li> </ul>
	<ul> <li>Inder the maps.</li> <li>Ind</li></ul>

Applicable/supporting case law:

.



Applicable/supporting scientific literature:

Other information (please specify): Site visit March 19, 2013.

U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01. South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents a perennial RPW tributary labeled as "Stream 5C" on the delineation depiction. Perennial RPWs are jurisdictional according to RGL 07-01. Therefore, Stream 5C is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 10 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: NewberryCity: ProsperityCenter coordinates of site (lat/long in degree decimal format):Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 6 = 101.95 linear feet: 4 width (ft) and/or 0.01 acres. Wetlands: acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>

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

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

#### SECTION III: CWA ANALYSIS

### A. TNWs AND WETLANDS ADJACENT TO TNWs

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

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

 (i) General Area Conditions: Watershed size: 146,192 acres ; HUC 03050106-04 Drainage area: 2 acres Average annual rainfall: 46.52 inches Average annual snowfall: 2.1 inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 ☐ Tributary flows directly into TNW.
 ☑ Tributary flows through 4 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 2-5 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: They do not.

Identify flow route to TNW<sup>5</sup>: Stream 6 flows into Stream 5B (form 8 of 13), which flows into Stream 7 (form 11 of 13), which flows into Stream 1A (form 2 of 13), which flows into Stream 10A (form 13 of 13), which flows into Cannons Creek, a TNW.

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

<sup>&</sup>lt;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.

Tributary stream order, if known: first.

(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):				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Moderately stable. Presence of run/riffle/pool complexes. Explain: <b>Not observed</b> . Tributary geometry: <b>Relatively straight.</b> Tributary gradient (approximate average slope): <b>1-5</b> %				
	<u>Flow:</u> Tributary provides for: <b>Seasonal flow</b> Estimate average number of flow events in review area/year: <b>11-20</b> Describe flow regime: <b>The contributions of drainage area and ground water provide seasonal base flow in the</b>				
tributary.	Other information on duration and volume:				
	Surface flow is: <b>Discrete and confined.</b> Characteristics: <b>Flow is confined to the channel</b> .				
	Subsurface flow: Unknown. Explain findings:				
	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         □       clear, natural line impressed on the bank         □       changes in the character of soil         □       shelving         □       shelving         □       vegetation matted down, bent, or absent         □       leaf litter disturbed or washed away         □       sediment deposition         □       water staining         □       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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>				
	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Historical surrounding land uses were agricultural and silvicultural. The land use/land cover in the watershed includes: 65.3% forested land, 18.1% agricultural land, 4.7% urban land, 2.7% forested wetland.				

7.1% water, 1.4% barren land, and 0.7% scrub/shrub land.

Identify specific pollutants, if known: sediment.

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

- Riparian corridor. Characteristics (type, average width): forested, greater than 100 feet wide.
- 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 tributary provides topographic and hydrologic changes in the landscape that support a variety of wildlife and species diversity.

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u>
  - Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain:

Surface flow is: **Pick List** Characteristics:

Subsurface flow: **Pick List**. Explain findings: Dye (or other) test performed:

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

#### (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List**. Estimate approximate location of wetland as within the **Pick List** floodplain.

### (ii) Chemical Characteristics:

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

identify specific pollutants, if known:

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs: Stream 6 enhances a variety of wildlife species by providing topographic and hydrologic changes in the landscape. The tributary transports water and sediment from adjacent uplands to the TNW (Cannons Creek). The tributary transfers nutrients and organic carbon that support downstream foodwebs. Monitoring performed by the South Carolina Department of Health and Environmental Control (SCDHEC) on Cannons Creek indicates that aquatic life uses are fully supported. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of Cannons Creek, this office has determined that there is a Significant Nexus between the review area relevant reach and the downstream TNW.

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

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

TNWs		width (ft), Or,	acres.
Wetlan	nds adjacent to TNWs:	acres.	

# 2. <u>RPWs that flow directly or indirectly into TNWs.</u>

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: Stream 6 is a first order stream with a drainage area of approximately 2 acres. The tributary is not shown on the USGS topographic map; however, the topographic contours signature indicates topography conducive to the formation of a stream. The tributary is depicted as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and an OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, sediment deposition, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate seasonal flow.

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

- Tributary waters: **101.95** linear feet **4** width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters:

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

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):

acres.

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

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

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

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

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

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

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

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

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

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

- 7. Impoundments of jurisdictional waters.<sup>9</sup>
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
    - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
  - Demonstrate that water is isolated with a nexus to commerce (see  $\dot{E}$  below).

Explain:

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

E.	DE	LATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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:
	Idei	ntify water body and summarize rationale supporting determination:
		vide 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.		N-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):
	Prov	vide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR
	facto	ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional
	judg	ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
	H	Lakes/ponds: acres.
	$\square$	Other non-wetland waters:     acres. List type of aquatic resource:       Wetlands:     acres.
	Prov	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such
		ding is required for jurisdiction (check all that apply):
		Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
	Н	Lakes/ponds:acres.Other non-wetland waters:acres. List type of aquatic resource:
		Wetlands: acres.
~~~		
<u>SEC</u>	CTIO	N IV: DATA SOURCES.
A. 9		PORTING 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: <b>S&amp;ME, Inc.</b> .
		Data sheets prepared/submitted by or on behalf of the applicant/consultant.
		Office concurs with data sheets/delineation report.
		Data sheets prepared by the Corps:
	$\bowtie$	Corps navigable waters' study: <b>1977</b> .
	$\square$	U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.
		USGS NHD data.
	$\boxtimes$	USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: <b>1:24,000, Little Mountain</b> .
		USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.
		National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.
	H	State/Local wetland inventory map(s): . FEMA/FIRM maps: .
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	$\boxtimes$	Photographs: Aerial (Name & Date): 11212:26, 1999 and 2006.

<sup>&</sup>lt;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*.

or 🔀 Other (Name & Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.

- Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.  $\boxtimes$ 
  - Applicable/supporting case law:
- Applicable/supporting scientific literature:
  - Other information (please specify): Site visit March 19, 2013.

U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01. South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

B. ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of a seasonal RPW tributary labeled as "Stream 6" on the delineation depiction. Seasonal RPWs are jurisdictional according to RGL 07-01; however, Significant Nexus findings for the record are included for Stream 6, as required by Rapanos Guidance. Therefore, Stream 6 is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 11 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: Newberry<br/>Center coordinates of site (lat/long in degree decimal format): Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83City: Prosperity

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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. <u>REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):</u>

Office (Desk) Determination. Date: May 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 7 = 738.66 linear feet: 5 width (ft) and/or 0.08 acres. Wetlands: acres.
- **c.** Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>

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

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

#### SECTION III: CWA ANALYSIS

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

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

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	l: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Natural         Image: Imag
	Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:
	Surface flow is: <b>Pick List.</b> Characteristics:
	Subsurface flow: <b>Pick List</b> . 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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii) Ch	emical Characteristics:

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

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

## (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

## (ii) Chemical Characteristics:

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

identify specific politicality, it known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

### C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Stream 7 is a first order stream with a drainage area of approximately 65 acres. The tributary is

depicted as a dashed blue line on the USGS topographic map and as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, leaf litter washed away, sediment deposition, water staining, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.

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):

acres.

Tributary waters: 738.66 linear feet 5 width (ft).

Other non-wetland waters:

Identify type(s) of waters:

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

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:

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

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.

- Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. 5.
  - 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

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

- 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
  - Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

- 7. Impoundments of jurisdictional waters.<sup>9</sup>
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
    - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
    - Demonstrate that water is isolated with a nexus to commerce (see E below).

**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>

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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.

	<ul> <li>which are or could be used by interstate or foreign travelers for recreational or other purposes.</li> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> <li>Other factors. Explain:</li> </ul>
	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.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.
<u>SEC</u>	CTION IV: DATA SOURCES.
A. \$	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> <li>National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.</li> <li>State/Local wetland inventory map(s):</li> <li>FEMA/FIRM maps:</li> <li>100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)</li> <li>Photographs: (Narve &amp; Date): 11212:26, 1999 and 2006.</li> <li>Corps of the source of the s</li></ul>
	<ul> <li>or  Other (Name &amp; Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.</li> <li>Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.</li> <li>Applicable/supporting case law:</li> <li>Applicable/supporting scientific literature:</li> <li>Other information (please specify): Site visit March 19, 2013.</li> </ul>

U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01.

South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents a perennial RPW tributary labeled as "Stream 7" on the delineation depiction. Perennial RPWs are jurisdictional according to RGL 07-01. Therefore, Stream 7 is a water of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 12 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: NewberryCity: ProsperityCenter coordinates of site (lat/long in degree decimal format):Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 9 = 1,273.75 linear feet: 5 width (ft) and/or 0.15 acres. Wetlands: Wetland J = 0.01 acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM., 1987 Delineation Manual, Pick List Elevation of established OHWM (if known):
- 2. <u>Non-regulated waters/wetlands (check if applicable)</u>:<sup>3</sup>

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

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

#### SECTION III: CWA ANALYSIS

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

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

#### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfal	l: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Natural         Image: Imag
	Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:
	Surface flow is: <b>Pick List.</b> Characteristics:
	Subsurface flow: <b>Pick List</b> . 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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii) Ch	emical Characteristics:

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

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

## (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

## (ii) Chemical Characteristics:

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

identify specific politicality, it known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

### C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Stream 9 is a first order stream with a drainage area of approximately 31 acres. The tributary is

not shown on the USGS topographic map; however, the topographic contours signature indicates topography conducive to the formation of a stream. The tributary is depicted as an intermittent stream on the USDA NRCS soil survey. This tributary has a well-defined channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, leaf litter washed away, sediment deposition, water staining, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.

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):

$\leq$	Tributary waters:	1,273.75	linear	feet 5	width	(ft).
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- Other non-wetland waters: acres.
  - Identify type(s) of waters:

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

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): width (ft).

Tributary waters: linear feet

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

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Ketlands 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: There is a continuous hydrologic surface connection between Wetland J and Stream 9.
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Wetland  $\mathbf{E} = 0.12$  acres.

- Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. 5.
  - 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

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

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

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.

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

- 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>

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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.

	<ul> <li>which are or could be used by interstate or foreign travelers for recreational or other purposes.</li> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> <li>Other factors. Explain:</li> </ul>
	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.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:         <ul> <li>Other: (explain, if not covered above):</li> <li>.</li> </ul> </li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.           Wetlands:         acres.
<u>SE</u>	CTION IV: DATA SOURCES.
Α.	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: 1:24,000, Little Mountain.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> <li>National wetlands inventory map(s):</li> <li>FEMA/FIRM maps:</li> <li>100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)</li> </ul>
	<ul> <li>Photographs: Aerial (Name &amp; Date): 11212:26, 1999 and 2006. or Other (Name &amp; Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.</li> <li>Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.</li> </ul>

Applicable/supporting case law:

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Applicable/supporting scientific literature:

Other information (please specify): Site visit March 19, 2013. U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01. South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of perennial RPW tributary labeled as "Stream 9" on the delineation depiction and abutting Wetland J. Perennial RPWs and their abutting wetlands are jurisdictional according to RGL 07-01. Therefore, Stream 9 and Wetland J are waters of the U.S. and within the jurisdiction 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 28, 2015

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston District Northwest Branch, Mid Carolina Commerce Park, SAC 2006-01792-5C, Form 13 of 13.

# C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South CarolinaCounty/parish/borough: Newberry<br/>Center coordinates of site (lat/long in degree decimal format): Lat. 34.239829° N, Long. 81.473983° W.<br/>Universal Transverse Mercator: NAD 83City: Prosperity

Name of nearest waterbody: Unnamed tributary to Cannons Creek

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 03050106-04

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 28, 2015

Field Determination. Date(s): March 19, 2013

#### 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: Stream 10 = 1,752.67 linear feet 12 width (ft) and/or 0.48 acres, Stream 10A = 3,4997.57 linear feet 12 width (ft) and/or 0.96 acres.

- Wetlands: acres.
- **c.** Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List Elevation of established OHWM (if known):
- 2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>
  - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

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

#### SECTION III: CWA ANALYSIS

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

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

### 1. TNW

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions:

Watershed size:	Pick List ;
Drainage area:	Pick List
Average annual rainfa	ll: inches
Average annual snowf	all: inches

# (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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

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

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

(b)	General Tributary Characteristics (check all that apply):         Tributary is:       Image: Natural         Image: Imag
	Tributary properties with respect to top of bank (estimate):Average width:feetAverage depth:feetAverage side slopes:Pick List.
	Primary tributary substrate composition (check all that apply):
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:       .         Presence of run/riffle/pool complexes. Explain:       .         Tributary geometry:       Pick List.         Tributary gradient (approximate average slope):       %
(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: Other information on duration and volume:
	Surface flow is: <b>Pick List.</b> Characteristics:
	Subsurface flow: <b>Pick List</b> . 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 changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>
(iii) Ch	emical Characteristics:

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

Identify specific pollutants, if known:

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

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

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

Aquatic/wildlife diversity. Explain findings:

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

#### (i) Physical Characteristics:

- (a) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain: .

Surface flow is: Pick List Characteristics:

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

- (c) Wetland Adjacency Determination with Non-TNW:
  - Directly abutting
  - □ Not directly abutting
    - Discrete wetland hydrologic connection. Explain:
    - Ecological connection. Explain:
    - Separated by berm/barrier. Explain:

## (d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List.** Estimate approximate location of wetland as within the **Pick List** floodplain.

## (ii) Chemical Characteristics:

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

Relating specific politicality, it known.

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List** Approximately ( ) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed:

# C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- **3.** Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 4. 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Streams 10 and 10A are a second order stream with a drainage area of approximately 900 acres.

The tributary is depicted as a dashed blue line on the USGS topographic map and as a perennial stream on the USDA NRCS soil survey. The tributary has a well-defined channel, continuous bed and bank, and OHWM with a natural line impressed on the bank, changes in the character of the soil, shelving, vegetation absent, leaf litter washed away, sediment deposition, water staining, destruction of terrestrial vegetation, sediment sorting, and scour. Available data and field observations indicate perennial flow.

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: Stream 10 = 1,752.67 linear feet 12 width (ft), Stream 10A = 3,4997.57 linear feet 12 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):

acres.

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

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

Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

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

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

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

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

- 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
  - Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

- 7. Impoundments of jurisdictional waters.<sup>9</sup>
  - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
    - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
    - Demonstrate that water is isolated with a nexus to commerce (see E below).

**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>

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

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

<sup>&</sup>lt;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*.

	<ul> <li>which are or could be used by interstate or foreign travelers for recreational or other purposes.</li> <li>from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.</li> <li>which are or could be used for industrial purposes by industries in interstate commerce.</li> <li>Interstate isolated waters. Explain:</li> <li>Other factors. Explain:</li> </ul>
	Identify water body and summarize rationale supporting determination:
	<ul> <li>Provide estimates for jurisdictional waters in the review area (check all that apply):</li> <li>Tributary waters: linear feet width (ft).</li> <li>Other non-wetland waters: acres. Identify type(s) of waters: .</li> <li>Wetlands: acres.</li> </ul>
F.	<ul> <li>NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):</li> <li>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.</li> <li>Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.</li> <li>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).</li> <li>Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:</li> <li>Other: (explain, if not covered above):</li> </ul>
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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.           Wetlands:         acres.
<u>SEC</u>	CTION IV: DATA SOURCES.
	<ul> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report.</li> <li>Data sheets prepared by the Corps:</li> <li>Corps navigable waters' study: 1977.</li> <li>U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.</li> <li>USGS NHD data.</li> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: 1:24,000, Little Mountain.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: Newberry County pages 35 and 43.</li> <li>National wetlands inventory map(s). Cite name: U42P, U21, PFO1B, PSS1/3B.</li> <li>State/Local wetland inventory map(s):</li> <li>FEMA/FIRM maps:</li> <li>100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)</li> <li>Photographs: (Narva &amp; Chert). Discover bartol. 28 of 28 chert bart barto approximate dated Newwher 20, 2012. Newwhere</li> </ul>
	<ul> <li>or  Other (Name &amp; Date): Photographs 1-28 of 28 taken by the consultant dated November 20, 2012, November 28, 2012, and December 10, 2012. Photographs 1-5 of 5 taken by the Corps dated March 19, 2013.</li> <li>Previous determination(s). File no. and date of response letter: SAC 2006-01792-5JC, May 22, 2008.</li> <li>Applicable/supporting case law:</li> <li>Applicable/supporting scientific literature:</li> <li>Other information (please specify): Site visit March 19, 2013.</li> </ul>

U.S. Army Corps of Engineers, June 5, 2007, Regulatory Guidance Letter (RGL) 07-01.

South Carolina Department of Health and Environmental Control. 2007. Watershed Water Quality Assessment: Broad River Basin. Technical Report No. 006-07. Bureau of Water, Columbia, South Carolina.

**B.** ADDITIONAL COMMENTS TO SUPPORT JD: This form documents a perennial RPW tributary labeled as "Stream 10" and "Stream 10A" on the delineation depiction. Perennial RPWs are jurisdictional according to RGL 07-01. Therefore, Streams 10 and 10A are waters of the U.S. and within the jurisdiction of the Clean Water Act.