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): July 17, 2015 B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 2; SAC 2015-00755-2JM / TRICOM Associates C. PROJECT LOCATION AND BACKGROUND INFORMATION: 8761 Dorchester Road State: South Carolina County/parish/borough: **Dorchester** City: **North Charleston** Center coordinates of site (lat/long in degree decimal format): Lat. 32.923813° N, Long. -80.126288° W. Universal Transverse Mercator: Name of nearest waterbody: Coosaw Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Ashlev River Name of watershed or Hydrologic Unit Code (HUC): 03050201 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form. D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: July 13, 2015. Field Determination. Date(s): **July 15, 2015. 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. B. CWA SECTION 404 DETERMINATION OF JURISDICTION. There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required] 1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): 1 TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: 0.07 acres. c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Pick List, Pick List Elevation of established OHWM (if known): 2. Non-regulated waters/wetlands (check if applicable): ³ [Including potentially jurisdictional features that upon assessment are NOT waters or wetlandsl Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

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

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

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1.	TNW Identify TNW:	
	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 waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

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

Tributary located offsite (i) General Area Conditions: Watershed size: 86,887 acres: Drainage area: 354 acres Average annual rainfall: 50 inches Average annual snowfall: inches (ii) Physical Characteristics: (a) Relationship with TNW: Tributary flows directly into TNW. Tributary flows through **Pick List** tributaries before entering TNW. Project waters are 1-2 river miles from TNW. Project waters are 1 (or less) river miles from RPW. Project waters are 1 (or less) aerial (straight) miles from TNW. Project waters are 1 (or less) aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain:

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

	Creek) to the TNW (Ashley River. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 10 to 15 feet Average depth: 10 to 12 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: Presence of run/riffle/pool complexes. Explain: Tributary geometry: Meandering. Based on aerial imagery and USGS maps, the tributary follows a meandering
route to the T	
	Tributary gradient (approximate average slope): 1 %
(c)	Flow: Tributary provides for: Perennial flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Other information on duration and volume:
	Surface flow is: Confined. Characteristics: .
	Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
likely has the	Tributary has (check all that apply): The tributary is located outside the project area and was not observed, but following characteristics, Bed and banks OHWM6 (check all indicators that apply): clear, natural line impressed on the bank the presence of litter and debris destruction of terrestrial vegetation shelving the presence of wrack line sediment sorting sediment so
(iii) Che	mical Characteristics:

Identify flow route to TNW5: Onsite wetlands to a piped and open stormwater system to Perennial RPW (Coosaw

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW. ⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. ⁷Ibid.

	Explain: Water quality is expected to be fair to good. The tributary is located in a developed area (residential and commercial), so, runoff and discharges of some pollutants are possible. entify specific pollutants, if known:
length of the	ological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): The width of the riparian corridor varies throughout the tributary due to the surrounding development. The riparian corridor ranges from no riparian area to ely 100 to 200 feet from either side of the tributary channel.
	Federally Listed species. Explain findings: .
including fish, re	☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: The tributary likely provides habitat for various aquatic organisms ptiles, amphibians, as well as various birds and mammals.
2. Charac	teristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	ysical Characteristics: General Wetland Characteristics: Properties: Wetland size: 0.07 acres Wetland type. Explain: Forested.
degredation	
a .	Project wetlands cross or serve as state boundaries. Explain:
water syster River. Flow	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Water flows from the wetland to the non-TNW Coosaw Creek through a storm n composed of open linear conveyances, pipes and storm water ponds. Coosaw Creek flows into the TNW Ashley from the wetland to Coosaw Creek is intermittent with more frequent flow events occurring during wetter times of l/or rain events when surface water in the wetland may be present.
	Surface flow is: Confined Characteristics:
	Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting
	☐ Discrete wetland hydrologic connection. Explain: Water flows from the wetland to the non-TNW Coosaw light a storm water system composed of open linear conveyances, pipes and storm water ponds. Coosaw Creek flows W Ashley River. ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
(d)	Proximity (Relationship) to TNW Project wetlands are 1-2 river miles from TNW. Project waters are 1 (or less) aerial (straight) miles from TNW.` Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 2-year or less floodplain.
Ch	nemical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: The area surrounding the northern and western sides of the wetland and project review area are developed. No water was observed in the wetland during the May 2015 site visit, but water quality of the wetland is anticipated to be fair to good. There were no obvious signs of degradation. entify specific pollutants, if known:
(iii) Bi	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for:

☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings:
Other environmentally-sensitive species. Explain findings:
Aquatic/wildlife diversity. Explain findings: The wetland is forested and is surrounded by forested uplands.
However, the project review area and adjacent parcels are surrounded by development that includes residential and commercial
development. The vegetation present within the wetland includes Quercus michauxii, Pinus taeda, Liquidambar styraciflua, Triadica
sebifera, and Ulmus americana. Aquatic organisms that may be found in the forested wetland include various species of insects,
amphibians, reptiles, mammals, and birds, all of which may use the wetlands for all or part of their lives, such as for foraging,
nesting and/or for shelter .
-

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

All wetland(s) being considered in the cumulative analysis: **3** Approximately (**45.56**) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland A (N) Wetland B (N) Wetland C (Y) Onsite Wetland (Y)	5.29 16.14 24.06 0.07		

Summarize overall biological, chemical and physical functions being performed: The review area includes the onsite 0.07 acre wetland and offsite wetlands totaling approximately 45.49 acres. The wetlands not only provide habitat for various aquatic and terrestrial organisms, including a variety of insects, amphibians, reptiles, mammals and birds, but are also a source of food, nutrients, and carbon for organisms located downstream. The wetlands are especially important for the water quality of a watershed. Water runoff from adjacent uplands may contain pollutants, sediments, excess nutrients, etc., that flow through the wetlands before entering the tributaries has the opportunity to be filtered out prior to flowing to downstream TNWs. In addition, excess water can temporarily be stored thereby minimizing potential flooding of downstream areas and can also slowly release water downstream to maintain seasonal flow volumes. Runoff water may also transport organisms, nutrients, and carbon from the wetlands into the tributaries, which continue to flow to downstream TNWs.

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The review area includes the onsite 0.07 acre wetland and offsite wetlands totaling approximately 45.49 acres. The wetlands not only provide habitat for various aquatic and terrestrial organisms, including a variety of insects, amphibians, reptiles, mammals and birds, but are also a source of food, nutrients, and carbon for organisms located downstream. The wetlands are especially important for the water quality of a watershed. Water runoff from adjacent uplands that may contain pollutants, sediments, excess nutrients, etc., that flow through the wetlands before entering the tributaries has the opportunity to be filtered out prior to flowing to downstream TNWs. In addition, excess water can temporarily be stored thereby minimizing potential flooding of downstream areas and can also slowly release water downstream to maintain seasonal flow volumes. Runoff water may also transport organisms, nutrients, and carbon from the wetlands into the tributaries, which continue to flow to downstream TNWs. Coosaw Creek drains directly into the Ashley River (TNW). According to SCDHEC's Watershed Water Quality Assessments, at the upstream monitoring station, MD-049, which is downstream of the drainage area for this cumulative review and the discharge point for Coosaw Creek into the Ashley River, aquatic life uses are not supported due to turbidity and dissolved oxygen excursions. Significant decreasing trend in turbidity, total nitrogen concentration, and fecal coliform bacteria concentrations suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions at this site. The watershed that the project review area is located in, HUC 03050201-06, has a high potential for growth and includes the Town of Summerville, Ladson, and the Cities of Charleston and North Charleston. The area surrounding the project review area is heavily developed with potential for future development to occur in the remaining undeveloped areas. including the project review area and adjacent parcels. When wetlands and streams are filled or altered, many of the services that they provide are compromised and the loss of those services affects downstream TNWs. The wetlands and tributary within the review area have a significant nexus to downstream TNWs as they provide a source of carbon and nutrients, can provide water quality functions, can store excess water minimizing flooding impacts downstream, can maintain seasonal flow volumes, and can transport organisms, carbon, nutrients, sediments, clean water, as well as pollutants, such as those associated with heavy traffic, landscaping chemicals, etc. found within the review area, that may be present or could become present, to downstream TNWs.

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

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL

THAT APPLY): 1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet width (ft), Or, acres. ■ Wetlands adjacent to TNWs: 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: Coosaw Creek is an RPW with year round flow and is identified as a blue line stream on USGS maps. Coosaw Creek has a large drainage area, is visible on aerial imagery and is depicted as a blue line feature on USGS topo maps. Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Non-RPWs⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

width (ft).

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

acres.

linear feet

Tributary waters:

Other non-wetland waters:

Identify type(s) of waters:

⁸See Footnote # 3.

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: 0.07 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: 0.07 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. 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:
SU 	DLATED [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): 10 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	entify water body and summarize rationale supporting determination:
Pro	wide 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.
NO	ON-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):

E.

F.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook. ¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

	facto	ride 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 professiona ment (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: .
	Ħ	Wetlands: acres.
	a fin	ide 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). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
Α.	SUPP	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked
. 10		requested, appropriately reference sources below):
		Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Project information was provided by Mr. Tyle
		o of Sabine & Waters, Inc on behalf of Tricom Associates, LLC.
	\bowtie	Data sheets prepared/submitted by or on behalf of the applicant/consultant. ☐ Office concurs with data sheets/delineation report.
		Office does not concur with data sheets/delineation report.
		Data sheets prepared by the Corps: .
		Corps navigable waters' study:
		U.S. Geological Survey Hydrologic Atlas: .
		USGS NHD data.
		USGS 8 and 12 digit HUC maps.
		U.S. Geological Survey map(s). Cite scale & quad name: 1:24000 USGS Stallsville Quad provided by T. Sgro dated 6/15/201
		USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Soil Survey information provided by T. Sgro d 6/15/2015.
		National wetlands inventory map(s). Cite name: NWI Wetlands Map provided by T. Sgro dated 6/15/2015 .
		State/Local wetland inventory map(s): 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): SCDNR 2006 Infrared Aerial provided by T. Sgro dated 6/15/2015.
	_	or \(\subseteq \text{Other (Name & Date): Undated site photos provided by T. Sgro.} \)
		Previous determination(s). File no. and date of response letter:
		Applicable/supporting case law:
		Applicable/supporting scientific literature: Other information (please specify): Plat provided by T. Sgro and prepared by Associated Surveyors of Summerville entitled.
		ctlands Plat on the Southern Part of Lot G-2 Owned by Tricom Associates LLC," dated July 31, 2015.
	,,,	Annual Time on the Southern Ture of Bot of a officer of Tricom Historians Bibo, and only off action

B. ADDITIONAL COMMENTS TO SUPPORT JD: The project area is a 2.59 acre site with 0.07 acres of wetlands. The onsite wetlands are part of a larger wetland system that extends offsite toward the south and east. The wetland system is adjacent to Coosaw Creek which is an RPW with year round flow and is identified as a blue line stream on USGS maps. Coosaw Creek empties into the Ashley River which is a TNW; therefore the project site is subject to regulation under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors 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 REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 17, 2015 B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 2 of 2; SAC 2015-00755-2JM / TRICOM Associates C. PROJECT LOCATION AND BACKGROUND INFORMATION: 8761 Dorchester Road State: South Carolina County/parish/borough: **Dorchester** City: **North Charleston** Center coordinates of site (lat/long in degree decimal format): Lat. 32.923813° N, Long. -80.126288° W. Universal Transverse Mercator: Name of nearest waterbody: Coosaw Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Ashlev River Name of watershed or Hydrologic Unit Code (HUC): 03050201 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form. D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: July 13, 2015 Field Determination. Date(s): **July 15, 2015 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. B. CWA SECTION 404 DETERMINATION OF JURISDICTION. There Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required] 1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): 1 TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: acres. c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Pick List, Pick List Elevation of established OHWM (if known): 2. Non-regulated waters/wetlands (check if applicable): ³ [Including potentially jurisdictional features that upon

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: There is one wetland located within the project review area that was determined to be isolated and non-

assessment are NOT waters or wetlands

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

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

³ Supporting documentation is presented in Section III.F.

jurisdictional. The wetland is approximately 0.28 acres. The wetland is surrounded by uplands and is positioned lower in the landscape than the adjacent uplands and had no linear features coming out of the wetland, and no evidence of discrete surface hydrologic connection through the uplands to other waters of the U.S. was observed. There was also no apparent shallow subsurface hydrologic connection, and no apparent physical, chemical, or biological connection, to waters of the U.S. In addition, the wetland has no apparent ecological interconnection to waters of the U.S. For these reasons, the wetland was determined to be isolated and non-jurisdictionL, therefore not regulated by Section 404 of the CWA.

SECTION III: CWA ANALYSIS

TNW

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.

_,	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 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 rainfall: inches
Average annual snowfall: inches
Physical Characteristics:
(a) Relationship with TNW:
☐ 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.

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

	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 ⁵ : Tributary stream order, if known:			
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:			
	Tributary properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes: Pick List.			
	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: 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: Pick List. Characteristics:			
	Subsurface flow: Pick List . Explain findings:			
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment deposition multiple observed or predicted flow events abrupt change in plant community other (list): Discontinuous OHWM. Explain:			
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.			
Che	emical Characteristics:			

(iii)

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW. ⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. ⁷Ibid.

		Cha	racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain:
		Ide	ntify specific pollutants, if known:
	(iv)	Biol	logical 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.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics:
		(a)	General Wetland Characteristics: 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)	Cha	emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Bio	logical 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.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () 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:

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

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

1.	TNWs and Adjacent Wetlands. TNWs: linear feet Wetlands adjacent to TNWs:	Check all that apply width (ft), Or, acres.	and provide size estimates in review area: acres.
2.	RPWs that flow directly or indicate a control of TNWs where tributary is perennial:		ow year-round are jurisdictional. Provide data and rationale indicating that

	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ 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.9 As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below). Explain:
SU	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, EGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY ICH WATERS (CHECK ALL THAT APPLY): 10 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:

E.

 ⁸See Footnote # 3.
 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 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.

	Identify water body and summarize rationale supporting determination:				
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.				
	Identify type(s) of waters: Wetlands: acres.				
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. ☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: ☐ Other: (explain, if not covered above):				
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <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: 0.28 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: Project information was provided by Mr. Tyler Sgro of Sabine & Waters, Inc on behalf of Tricom Associates, LLC .				
	Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report.				
	☐ Office does not concur with data sheets/delineation report. ☐ Data sheets prepared by the Corps: ☐ Corps navigable waters' study: ☐ .				
	U.S. Geological Survey Hydrologic Atlas:☐ USGS NHD data.				
	 USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: 1:24000 USGS Stallsville Quad provided by T. Sgro dated 6/15/2015. USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Soil Survey information provided by T. Sgro 				
	dated 6/15/2015. National wetlands inventory map(s). Cite name: NWI Wetlands Map provided by T. Sgro dated 6/15/2015. State/Local wetland inventory map(s):				
	FEMA/FIRM maps: . 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Notographs: Aerial (Name & Date): SCDNR 2006 Infrared Aerial provided by T. Sgro dated 6/15/2015.				
	or ☑ Other (Name & Date): Undated site photos provided by T. Sgro. Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature:				
	Other information (please specify): Plat provided by T. Sgro and prepared by Associated Surveyors of Summerville entitled "Wetlands Plat on the Southern Part of Lot G-2 Owned by Tricom Associates LLC," dated July 31, 2015.				

B. ADDITIONAL COMMENTS TO SUPPORT JD: This is a 2.59 acre site with 0.28 acres of non-jurisdictional wetlands. There is no discernible connection between the wetlands and any other waters of the U.S; therefore the project site is not subject to regulation under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.