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): 15-August-2015

B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 2; SAC 2015-00618 Calhoun County IP Site
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Calhoun City: Sandy Run Center coordinates of site (lat/long in degree decimal format): Lat. 33.798036° N, Long. 81.003375° W. Universal Transverse Mercator: NAD 83 Name of nearest waterbody: Unnamed Tributary of Sandy Run Name of nearest Traditional Navigable Water (TNW) Into which the aquatic resource flows: Congaree River Name of watershed or Hydrologic Unit Code (HUC): 03050110-03 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: 15-August-2015 ☐ Field Determination. Date(s): 16-June-2015
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew 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.
The	re 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): 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
4=2	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: PRPW 1=2,891.14 linear feet, PRPW 2=118.10 linear feet, SRPW 3=864.63 linear feet, PRPW 331.56 linear feet and SRPW 5=283.37 linear feet: width (ft) and/or acres. Wetlands: Wetland B=1.16 acres, Wetland C=3.14 acres, Wetland D=39.10 acres, and Wetland D=0.43 acres.
*PF	PW 1 and SRPW 3 are the same tributary that have been separated by the property boundary. This tributary flows into Wetland D and the

he OHWM disappears in the wetland. For the majority of the tributary is perennial, so it will be documented as perennial on this form.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Established by OHWM., Pick List Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

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).

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

If the 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

(i) General Area Conditions:

Watershed size: 232,276 acres; 03050110-03

Drainage area: 94 acres

Average annual rainfall: **45.05** inches Average annual snowfall: **1.2** inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 2 tributaries before entering TNW.

Project waters are **5-10** 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:

³ Supporting documentation is presented in Section III.F.

⁴ 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 ⁵ : Unnamed Tributary which flows to Sandy Run which flows to the Congaree River (Navigable Water of the US and Traditional Navigable Water). Tributary stream order, if known: first.
(b)	General Tributary Characteristics (check all that apply): Tributary is:
This causes	Manipulated (man-altered). Explain: There is an existing road that crosses over the tributary. the tributary to lose it's OHWM as it flows into Wetland D.
	Tributary properties with respect to top of bank (estimate): Average width: 2-3 feet Average depth: 1-2 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: According to the soil survey, the tributary is surrounded by Totness soils. Totness soils are
frequently f	
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Tributary is impacted by a road. Presence of run/riffle/pool complexes. Explain: None . Tributary geometry: Relatively straight. Tributary gradient (approximate average slope): %
(c)	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Tributary flows during wetter months and after heavy rain. Other information on duration and volume: Tribtuary has an OHWM
	Surface flow is: Discrete and confined. Characteristics: Tribtuary flows in channel during normal conditions.
	Subsurface flow: Unknown . Explain findings: Dye (or other) test performed: .
	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 vegetation matted down, bent, or absent vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition sediment deposition water staining other (list): Discontinuous OHWM. ⁷ 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:
(iii) Ch	emical Characteristics:

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: The tribtuary is located in the Congaree River Watershed. This watershed occupies 232,276 acres of the Sandhills and Upper Coastal Plain regions. The watershed is 35.8% forested land, 27% agricultural land, 24.4% forested wetland, 10.9% urban land, 1.5% water, 0.4% nonforested wetland, and 0.2% barren land. Sandy Run is a blackwater system that is characterzsed by naturally low pH conditions. Identify specific pollutants, if known: Possible pollutants from the nearby roads and plant near the site. (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: \boxtimes Habitat for: Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: The seasonal tribtuary provides breeding grounds for aquatic species. Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: The seasonal tributary provides habitat for wildlife in the area. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW **Physical Characteristics:** (a) General Wetland Characteristics: Properties: Wetland size: 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) All wetland(s) being considered in the cumulative analysis: Pick List) acres in total are being considered in the cumulative analysis. Approximately (

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

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: SRPW 5 is performing a variety of functions that relate to the biological, chemical, and physical integrity of the downstream TNW. The seasonal tribtuary provides breeding grounds and forgaging areas for aquatic species and habitat for wildlife in the area. The tributary is filtering runoff and pollutants from the nearby plant and roads before they travel down stream. The seasonal tributary also performs flow maintenance by storing flood water in times of heavy rain and during the wetter months. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the down stream TNW (Congaree River), it has been determined there is a significant nexuse between the relavent reach of the tributary to 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: 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: PRPW 1, PRPW2, and SRPW 3 are all part of the same system that has been broken up by road and property boundaries. This tributary is shown on the topo map starting as a dashed line and then turning into a solid blue line. The tributary has an OHWM and distinct channel, but loses these features as it flows through the wetland. PRPW 4 is a named tributary (Sandy Run) that is shown as a blur line on the topo map and as perennial on the soil survey. Stream characteristics observed and available data led this office to conclude the tributaries have a perennial flow regime.	ds
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: SRPW 5 is shown as a natural cotour on the topo map. This tributary flows into Wetland D, but is impact by a road. After the road, thw tribtuary loses it's characteristics and spreads out into the wetland. It was not observe flowing on the day of the Corps site visit, but was observed flowing during flagging by the consultant. Stream characteristics observed and available data led this office to conclude the tributary has a seasonal flow regime.	ted
4=2	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: PRPW 1=2,891.14 linear feet, PRPW 2=118.10 linear feet, SRPW 3=864.63 linear feet, PRPW 31.56 linear feet and SRPW 5=283.37 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: Wetland B & C are abutting the PRPW 1, PRPW2, and SRPW 3 system. This was observed in the field. Wetland D & E are abutting Sandy Run. This is shown on aerial photography.	
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:	is
D=3	Provide acreage estimates for jurisdictional wetlands in the review area: Wetland B=1.16 acres, Wetland C=3.14 acres, Wetland 10 acres, and Wetland D=0.43 acres.	nd
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 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 as with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.	nd
	Provide estimates for jurisdictional wetlands in the review area: acres.	
7.	mpoundments of jurisdictional waters. ⁹ As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.	

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	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): 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:
	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: acres.
SE	CTION IV: DATA SOURCES.
A.	SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&ME. Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. This office agrees with the conclusions of the data sheets. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: 1977 Navigability Study. 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: Gaston 1:24,000.

 $^{^{10}}$ 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.

\boxtimes	USDA Natural Resources Conservation Service Soil Survey. Citation: (2) Ailey, Johnston, Lucy, Totness, Troup, Vaucluse.
\boxtimes	National wetlands inventory map(s). Cite name: U42P, PFO1, PSS3B, U32, U42, U43 .
	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): 11206:15, 1999.
	or 🔀 Other (Name & Date): Photos 1-14 of 14 taken by S&ME dated April 27, 28, & 30, 2015.
\boxtimes	Previous determination(s). File no. and date of response letter: 81-2003-0566, September 18, 2003.
	Applicable/supporting case law: .
	Applicable/supporting scientific literature: .
\boxtimes	Other information (please specify): Site Visit.

B. ADDITIONAL COMMENTS TO SUPPORT JD: Aquatic resources documented on this form include 3 perennial RPWS, 2 seasonal RPWS, and 4 abutting wetlands. RPWs and abutting wetlands are jurisdictional according to RGL 07-01, however, the significant nexus findings for the record are included for the seasonal RPW as required by Rapanos Guidance. Therefore, all waters documented on this form are waters of the U.S. and within 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 REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 15-August-2015 DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 2 of 2; SAC 2015-00618 Calhoun County IP Site C. PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Calhoun City: Sandy Run Center coordinates of site (lat/long in degree decimal format): Lat. 33.798036° N, Long. 81.003375° W. Universal Transverse Mercator: NAD 83 Name of nearest waterbody: Unnamed Tributary of Sandy Run Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A Name of watershed or Hydrologic Unit Code (HUC): 03050110-03 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: 24-June-2015 Field Determination. Date(s): 16-June-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: Pick List, Pick List, Pick List

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: The 329.40 acre site contains one isolated wetland (Wetland A) that is 0.59 acres. Wetland A was determined to be isolated in 2003 as a part of jurisdictional determination for a larger tract (SAC-81-2003-0566). Wetland A is

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.

over 1,000 feet from the nearest on-site jurisdictional water (a blue line stream with abutting wetlands). The topo map shows a signature that could possiblybe a drainage feature, but this was not observed in the field by the Corps. There may have been one historically, however there have been site manipulations, such as logging, that have impacted the site. There are several logging ruts near the wetland that end in uplands and provide no connection for the wetland. Wetland A is located close to the property boundary. Any possible off-site features are located uphill from the wetland and would be flowing into the wetland There are no signs of drainage features, shallow subsurfance flow or overland flow off-site or to other waters on-site. This isolated wetland shows no evidence of biological, chemical, or physical connectivity to waters of the U.S. There is also no apparent connection to interstate or foreign commerce. In addition, there is no apparent evidence of ecological interconnectivity between the isolated wetland and waters of the U.S. This office has determined that this wetland is isolated from waters of the U.S. and not within the jurisdiction of the Clean Water Act.

SECTION III: CWA ANALYSIS

TAIX

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.	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

(i)	General Area Cond	itions:	
	Watershed size:	Pick List	;
	Drainage area:	Pick List	
	Average annual rainf	all: inc	ches
	Average annual snow	rfall: ii	nches
(ii)	Physical Characteri	stics:	
	(a) Relationship wit	h TNW:	
	☐ Tributary flo	ws directly in	nto TNW

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

	☐ 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 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 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: Dye (or other) test performed:
	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 shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining 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 Wean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.

⁷Ibid.

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.

		☐ tidal gauges ☐ other (list):
	(iii)	Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Identify specific pollutants, if known:
	(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.	Cha	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical 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)	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.	Cha	Aracteristics 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:

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

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

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

	☐ 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. 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	CLATED [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:

E.

⁸See Footnote # 3.

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.

	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: acres.
SEC	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
-1.	and requested, appropriately reference sources below):
	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&ME . Data sheets prepared/submitted by or on behalf of the applicant/consultant.
	☐ Office concurs with data sheets/delineation report. This office agrees with the conclusions of the data sheets.
	☐ Office does not concur with data sheets/delineation report. ☐ Data sheets prepared by the Corps:
	Corps navigable waters' study: 1977 Navigability Study.
	☑ 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: Gaston 1:24,000. USDA Natural Resources Conservation Service Soil Survey. Citation: (2) Ailey, Johnston, Lucy, Totness, Troup, Vaucluse. National wetlands inventory map(s). Cite name: U42P, PFO1, PSS3B, U32, U42, U43. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs:
	National wetlands inventory map(s). Cite name: U42P, PFO1, PSS3B, U32, U42, U43.
	State/Local wetland inventory map(s): FEMA/FIRM maps:
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	 Photographs: ☐ Aerial (Name & Date): 11206:15, 1999. or ☐ Other (Name & Date): Photos 1-14 of 14 taken by S&ME dated April 27, 28, & 30, 2015.
	Previous determination(s). File no. and date of response letter: 81-2003-0566 , September 18 , 2003 .
	Applicable/supporting case law: Applicable/supporting scientific literature:
	Other information (please specify): Site Visit .

B. ADDITIONAL COMMENTS TO SUPPORT JD: The 329.40 acre site contains one isolated wetland (Wetland A) that is 0.59 acres. Wetland A was determined to be isolated in 2003 as a part of jurisdictional determination for a larger tract (SAC-81-2003-0566). Wetland A is over 1,000 feet from the nearest on-site jurisdictional water (a blue line stream with abutting wetlands). The topo map shows a signature that could possiblybe a drainage feature, but this was not observed in the field by the Corps. There may have been one historically, however there have been site manipulations, such as logging, that have impacted the site. There are several logging ruts near the wetland that end in uplands and provide no connection for the wetland. Wetland A is located close to the

property boundary. Any possible off-site features are located uphill from the wetland and would be flowing into the wetland There are no signs of drainage features, shallow subsurfance flow or overland flow off-site or to other waters on-site. This isolated wetland shows no evidence of biological, chemical, or physical connectivity to waters of the U.S. There is also no apparent connection to interstate or foreign commerce. In addition, there is no apparent evidence of ecological interconnectivity between the isolated wetland and waters of the U.S. This office has determined that this wetland is isolated from waters of the U.S. and not within the jurisdiction of the Clean Water Act.