APPROVED JURISDICTIONAL DETERMINATION FORM

U.S. Army Corps of Engineers

Form 1 of 2

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): May 4, 2016
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 2; SAC # 2015-01748-2T
С.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Berkeley City: Goose Creek Center coordinates of site (lat/long in degree decimal format): Lat. 33.062283° N, Long80.104251° W. Universal Transverse Mercator: Name of nearest waterbody: Laurel Bay/ Goose Creek Reservoir/ Goose Creek
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A Name of watershed or Hydrologic Unit Code (HUC): 3050201 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: ☐ Field Determination. Date(s): 10/22/15
	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:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re 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): 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

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

2. Non-regulated waters/wetlands (check if applicable):³ [Including potentially jurisdictional features that upon

Elevation of established OHWM (if known):

assessment are NOT waters or wetlands]

SECTION I: BACKGROUND INFORMATION

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.

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-jurisdictional. The wetland is a depressional wetland, is surrounded by uplands, and has no ditches, swales or other linear features coming out of it that would potentially provide a surface hydrologic connection from the wetland to a water of the U.S. In addition, there was no visible signs of discrete flow through the uplands from the isolated wetland to waters of the U.S. There was also no apparent shallow subsurface hydrologic connection, and no apparent physical, chemical, or biological connection, to waters of the U.S. The wetlands also have no apparent ecological interconnectivity to waters of the U.S. For these reasons, Wetland 1 was determined to be isolated and non-jurisdictional and 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.

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 Con	ditions:	
	Watershed size:	Pick I	List;
	Drainage area:	Pick L	ist
	Average annual rai	nfall:	inches
	Average annual sno	owfall:	inches
(ii)	Physical Characte	ristics:	
	(a) Relationship v	vith TNW:	
	☐ Tributary f	lows direct	ly into 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 water wate
	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. ⁷ Explain: . the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics 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.

(iii) Chemical Characteristics: Characterize irbutary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.) Explain: Identify specific pollutanus, if known: (iv) Biological Characteristics. Chamael supports (check all that apply):			☐ tidal gauges ☐ other (list):
Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fishspawn areas. Explain findings: Gher or wind findings: Characteristics Characteristics Characteristics Characteristics Characteristics Characteristics Characteristics Characteristics Characteristics Wetland duameteristics: Properties: Wetland type. Explain: Wetland outlin, Explain: Wetland type. Explain: Wetland type. Explain: Wetland type. Explain: Wetland type. Explain: Project wetlands cross or serve as state boundaries. Explain: Project wetlands cross or serve as state boundaries. Explain: Project wetlands cross or serve as state boundaries. Explain: Surface flow is: Pick List. Explain: Surface flow is: Pick List. Explain findings: Directly abuting Wetland Ladjacency Determination with Non-TNW: Directly abuting Coological connection. Explain: Separate by bermbariner: Explain: Separate of Pick List (Separateristics: Separate Separateristics: Separate Separateristics: Separ	(i	Ch	aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.) Explain:
(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 Surface flow: Pick List. Explain: Ecological connection. Explain: Ecological connection. Explain: Cological connection. Explain: Scological connection. Explain: Cological connection. Explain: Ecological connection. Explain: Cological connection.	(iv) Biolog	gical C	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:
(a) General Wetland Characteristics: Properties: Wetland type. Explain: 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 Not directly abutting Spearated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project waters are Pick List inver miles from TNW. Project waters are Pick List areial (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: Aquatic/wildlife diversity. Explain findings: Approximately ()) acres for the tributary (if any) All wetland(s) being considered in the cumulative analysis.	2. (Charac	teristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
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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 Discrete wetland hydrologic connection. Explain: Ecological 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: Habitat for: Fish/spawn areas. Explain findings: Gleerally Listed species. Explain findings: Apuatic/wildlife diversity. Explain findings: Aquatic/wildlife diversity. Explain findings: Aquatic/wildlife diversity. Explain findings: Aquatic/wildlife diversity. Explain findings: Approximately (a) acres in total are being considered in the cumulative analysis.		(b)	
Dye (or other) test performed: (c) Wetland Adjacency Determination with Non-TNW:			Characteristics: .
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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: Aquatic/wildlife diversity. Explain findings: Aquatic/wildlife diversity. Explain findings: Aquatic/wildlife diversity. Explain findings: Approximately () acres in total are being considered in the cumulative analysis.		(d)	Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List .
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: Aquatic/wildlife diversity. Explain findings: All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	(i	Ch	aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	((iii) Bio	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:
Approximately () acres in total are being considered in the cumulative analysis.	3. (
For each wetland, specify the following:	For each w	Ap	pproximately () acres in total are being considered in the cumulative analysis.

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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:
DE	OLATED [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.
 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: Approximately 2 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.
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: Sabine and Waters, Inc. Data sheets prepared/submitted by or on behalf of the applicant/consultant. Concurs with conclusions. 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: USDA Natural Resources Conservation Service Soil Survey. Citation: Lynchburg. Norfolk, Goldsboro National wetlands inventory map(s). Cite name: PFO1 State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): Berkeley 2006, Google 2014 or Other (Name & Date): Elevated dataset for a supplemental transfer of the suppleme
	Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetland 1 was determined to be isolated and not jurisdictional; therefore, it is not regulated by Section 404 of the Clean Water Act. The jurisdictional status of the sand mining pits, Wetland 2, and the linear conveyance are discussed on Form 2 of 2.

APPROVED JURISDICTIONAL DETERMINATION FORM

U.S. Army Corps of Engineers

Form 2 of 2

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): May 4, 2016

В.	DISTRICT OFFICE, FILE N	AME, AND NUMBER: JD Form 2 of 2	2; SAC # 2015-01748-2T	
C.	PROJECT LOCATION AND	BACKGROUND INFORMATION:		
	State: South Carolina	County/parish/borough: Berkeley	City: Goose Creek	

Universal Transverse Mercator:
Name of nearest waterbody: Laurel Bay/ Goose Creek Reservoir/ Goose Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A

Name of watershed or Hydrologic Unit Code (HUC): 3050201

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Center coordinates of site (lat/long in degree decimal format): Lat. 33.062283° N, Long. -80.104251° W.

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.	REV	/IEW	PERF	ORMED	FOF	R SITE EV	VALUATION	(CHECK ALL	THAT APPLY):

Office (Desk) Determination. Date:
Field Determination. Date(s): 10/22/15

SECTION I: BACKGROUND INFORMATION

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

Indica	te presence of waters of U.S. in review area (check all that apply): 1
	TNWs, including territorial seas
	Wetlands adjacent to TNWs
	Relatively permanent waters ² (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
\boxtimes	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
	Indica

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: Wetland B: 2.69 acres.

c. Limits (boundaries) of jurisdiction based on: 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 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.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: There is one non-jurisdictional linear feature located within the project review area. The linear feature is approximately 6-8 feet deep and 10 feet wide. The linear feature was full of water at the time of the site visit; however, the site visit was made after approximately 24" of precipitation fell in the area. In addition, it appeared that the water observed within the linear conveyance was being pumped in from the adjacent mining ponds. During a previous site visit for another jurisdictional determination on the same property, the linear conveyance was dry. While the linear conveyance was full of water, it appears to have been excavated from uplands, did not display an OHW mark, or evidence of relatively permanent flow. For these reasons, the linear conveyance was determined to be non-jurisdictional and not regulated by Section 404 of the CWA.

Three (3) ponds that are a result of active sand mining activities in uplands are located within the project review area. The mining operations are associated with SCDHEC Mining Permit # 1-001670. As stated in the Preamble to the November 13, 1986, Regulations found on page 41217 (Federal Register vol. 51 No. 219) "waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and resulting body of water meets the definition of waters of the United States" are generally not considered waters of the U.S. For these reasons, the three mining ponds were determined to be non-jurisdictional and not regulated by Section 404 of the CWA. The non-jurisdictional ponds are shown on the survey plat.

One pond constructed for stormwater purposes is also present within the project review area. The pond appears to have been excavated from uplands for the purposes of stormwater management. It consists of open waters and does not meet the three parameters of a wetland. The pond is associated with SCDHEC NPDES Permit # SCR10F979. For these reasons, the stormwater pond was determined to be non-jurisdictional and not regulated by Section 404 of the CWA. The non-jurisdictional pond is shown on the survey plat.

While the linear conveyance and ponds are not jurisdictional, the linear conveyance and several ponds provide a hydrologic connection for Wetland B located within the project review area. The details of the hydrologic connect and the jurisdictional status of the wetland are discussed in Section III of this form.

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

A portion of the project review area was included in the significant nexus determination for SAC-2014-01294. The tributary discussed in this section was previously discussed and included in the significant nexus determination from SAC-2014-01294. The tributary is located offsite.**

(i) General Area Conditions:

Watershed size: 206,457 acres;

Drainage area: 1050 acres The drainage area was approximated using topo maps for the purposes of this jurisdictional determination only. Note: The approximate 950 acre drainage area discussed in the previous jurisdictional determination SAC-2014-01294 included a portion of the project review area for the subject jurisdictional determination, SAC-2015-01748. The drainage area for the review of the subject jurisdictional determination was increased by approximately 100 acres to account for the additional uplands and Wetland B that drain through a non-jurisdictional linear conveyance, a series of man-made mining ponds and piped conveyances into the original approximate 950 acre drainage area and Wetland 4 of SAC-2014-01294.

Average annual rainfall: 48 inches Average annual snowfall: 0 inches (ii) Physical Characteristics: 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 Project waters are 5-10 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: Identify flow route to TNW5: Wetland B to offsite wetlands to offsite RPW2 to Laurel Bay to Goose Creek Reservoir/ Goose Creek. Tributary stream order, if known: 1st. (b) General Tributary Characteristics (check all that apply): Tributary is: ■ Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: The offsite RPW 2 appears to be natural but is likely manipulated along a portion(s) of its length. Tributary properties with respect to top of bank (estimate): The tributary channel was not observed as it is located offsite. Average width: feet Average depth: feet Average side slopes: Pick List. Primary tributary substrate composition (check all that apply): Although the tributary channel was not observed as it is located offsite, the composition is likely similar to other tributaries in the area potentially consisting of the following. ⊠ Silts Sands Concrete Cobbles Gravel ☐ Muck Bedrock ☐ Vegetation. Type/% cover: Other. Explain:

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

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.

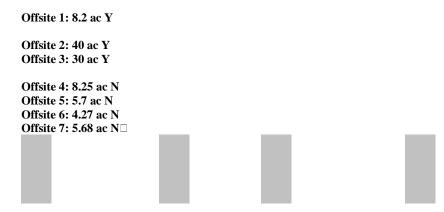
observed as	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The tributary channel was not it is located offsite. Based on aerial photography, the tributary appears to be located within forested wetlands with
	ks that are likely vegetated; therefore, the tributary is likely stable.
	Presence of run/riffle/pool complexes. Explain:
	Tributary geometry: Relatively straight.
	Tributary gradient (approximate average slope): 1 %
(c)	Flow:
(5)	Tributary provides for: The tributary channel was not observed as it is located offsite, but it appears as a named
at a lower ele	outary (King Branch) on topo maps, has a drainage area of approximately 1050 acres that includes wetlands, and is evation than surrounding areas. In addition, this tributary appears to be similar to the RPW 1 discussed on SAC-Form 2 of 3, that was determined to be perennial. For these reasons, it was concluded that RPW 2 is perennial. 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:
mark is likel	Tributary has (check all that apply): Although the tributary channel was not observed as it is located offsite, a OHV y present and similar to other tributaries in the area.
	M n. J J l
	 ☑ Bed and banks ☑ OHWM⁶ (check all indicators that apply):
	☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
	changes in the character of soil destruction of terrestrial vegetation
	shelving the presence of wrack line
	vegetation matted down, bent, or absent sorting sediment sorting
	☐ leaf litter disturbed or washed away ☐ scour
	sediment deposition multiple observed or predicted flow events
	water staining abrupt change in plant community
	☐ other (list): ☐ Discontinuous OHWM. ⁷ Explain:
	☐ Discontinuous Offwin. 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: Mean High Water Mark indicated by:
	oil or scum line along shore objects survey to available datum;
	fine shell or debris deposits (foreshore) physical markings;
	physical markings/characteristics vegetation lines/changes in vegetation types.
	☐ tidal gauges
	other (list):
(iii) Che	emical Characteristics:
	aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
	Explain: The tributary channel was not observed as it is located offsite, but the water quality is likely good to fair
	as the drainage area and surrounding area are partially developed. Based on aerial photographs, the area
	surrounding the relevant reach drainage area consists of forested uplands and wetlands, roads, residential
· .	subdivisions, small retail/commercial development, and areas under construction.
Ide	ntify specific pollutants, if known:
Biological Cl	haracteristics. Channel supports (check all that apply):
	Riparian corridor. Characteristics (type, average width):
	Wetland fringe. Characteristics: .
$\overline{\boxtimes}$	Habitat for:
	Federally Listed species. Explain findings:
	Fish/spawn areas. Explain findings:
	Other environmentally-sensitive species. Explain findings:
onieme inalest	Aquatic/wildlife diversity. Explain findings: The tributary channel likely provides habitat for various aquatic
amsins includ	ing fish, reptiles, amphibians, as well as various birds and mammals .

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.

2. (Charact	eristics of wetlands adjacent	to non-TNW that fl	ow directly or indirectly i	nto TNW
(i	i) Phy	vsical Characteristics:			
	(a)	General Wetland Characterist	ics:		
		Properties: Wetland size: 2.69 acres			
		Wetland type. Explain: F	orested.		
		Wetland quality. Explain	: Good.		
		Project wetlands cross or serv	re as state boundaries	s. Explain: .	
	(b)	General Flow Relationship w		Com Wales I D 4 de a	
			wetlands to the offsi		on-jurisdictional linear feature to the non- and may occur seasonally and/or after
		Surface flow is: Discrete and	confined		
		Characteristics: .			
		Subsurface flow: Unknown.	Explain findings:		
		Dye (or other) test per	formed: .		
	(c)	Wetland Adjacency Determin	ation with Non-TNV	<u>V:</u>	
		☐ Directly abutting ☐ Not directly abutting			
		Discrete wetland hydr			and B can flow into the non-jurisdictional
					the wetland. From the non-jurisdictional
					o 6, and then to an offsite non- wetland (Wetland 4) and tributary that
					ne offsite RPW 2 goes to Laurel Bay and
		eek Reservoir/Goose Creek.			-
		☐ Ecological connection☐ Separated by berm/ba			
		Separated by berni/ba	ппет. Ехріані.	•	
	(d)	Proximity (Relationship) to T			
		Project wetlands are 5-10 rive Project waters are 5-10 aerial		TNW	
		Flow is from: Wetland to nav		II III W.	
		Estimate approximate location		in the Pick List floodplain.	
(i		emical Characteristics:			
	Cha				water quality; general watershed good. Mining activities are occuring in the
		uplands near Wetland B.	. The quality of the	wettand appeared to be g	you. Willing activities are occuring in the
	Ideı	ntify specific pollutants, if know	vn: .		
((iii) Bio	logical Characteristics. Wetl			
	님	Riparian buffer. Characteristi Vegetation type/percent cover		dth): .	
	\boxtimes	Habitat for:	i. Explain.		
		Federally Listed species.			
		☐ Fish/spawn areas. Explain☐ Other environmentally-ser		ain findings.	
					s habitat for various species of insects,
phibian	ıs, repti				of their lives, such as for foraging,
ting an	d/or for	r shelter.			
3. (eristics of all wetlands adjace			
		wetland(s) being considered in proximately (104.2) acres in to			vsis
each w		specify the following:	mai are being conside	crea in the cumulative allary	y 515.
	—,		Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
			Size (in acres)	Directly douts: (1/11)	Size (iii deres)
		Onsite Wetland R: 2.69			

ac N



Summarize overall biological, chemical and physical functions being performed: The area of this cumulative analysis review includes the onsite Wetland B, which is 2.69 acres in size, and the offsite 102.55 acres of wetlands and approximately 6,000 linear feet of tributary (King Branch). These wetlands within the cumulative analysis review area provide a variety of functions that are important for the downstream waters and the watershed as a whole. 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 headwater 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.

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: The area of this cumulative analysis review includes the onsite Wetland B, which is 2.69 acres in size, and the

offsite 102.55 acres of wetlands and approximately 6,000 linear feet of tributary (King Branch). These wetlands within the cumulative analysis review area provide a variety of functions that are important for the downstream waters and the watershed as a whole. 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 headwater 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.

The approximate 950 acre drainage area discussed in the previous jurisdictional determination SAC-2014-01294 included a portion of the project review area for the subject jurisdictional determination, SAC-2015-01748. The drainage area for the review of the subject jurisdictional determination was increased by approximately 100 acres to account for the additional uplands and Wetland B that drain through a non-jurisdictional linear conveyance, a series of man-made mining ponds and piped conveyances into the original approximate 950 acre drainage area and Wetland 4 of SAC-2014-01294.

According to the SCDHEC Watershed Assessment information available online, this watershed includes the Town of Moncks Corner, Hanahan, Goose Creek, Ladson, and portions of the City of Charleston, North Charleston and the Town of Summerville. Future growth is expected and is occurring in the watershed. There are eight monitoring stations along the Goose Creek Reservoir and two in Goose Creek. In the Goose Creek Reservoir, recreational activities are fully supported at all of the monitoring sites. For sites RL-04390, 06434, 08065, and 07017, aquatic life uses are partially supported due to dissolved oxygen excursions. At the next downstream station, ST-033, aquatic life uses are not supported due to total phosphorus excursions. Aquatic life uses are fully supported at RL-05412 and 07001. At the furthest downlake station, ST-032, aquatic life uses are not supported due to total phosphorus excursions and there is a significant increasing trend in total phosphorus concentration. The uplands within the project area that is the subject of this jurisdicctional determination are currently being mined. This project review area and the approximate 1050 acre drainage area that are being considered in this cumulative analysis are located within an area of Berkeley County that is being developed. All of the approximate 106.89 acres of wetlands considered in this cumulative analysis are likely performing many of the services that wetlands provide; however, when wetlands are filled or altered, the services they provide may be compromised and the loss of those services affects downstream waters and TNWs, including Goose Creek Reservoir/Goose Creek and the Cooper River.

Wetland B within the project review area of the subject jurisdictional determination SAC-2015-01748 has a positive significant nexus to downstream TNWs based on jurisdictional determination SAC-2014-01294 that determined that the wetlands within the review area had a positive significant nexus to downstream TNWs. All of the 104.2 acres of wetlands, including the onsite Wetland B, within the cumlative analysis review area, may provide a source of carbon and nutrients, may provide water quality functions, may store excess water minimizing flooding impacts downstream, can maintain seasonal flow volumes, and may transport organisms, carbon, and nutrients. In addition, the wetlands are likely contributing to the relatively good water quality and integrity of the downstream TNW.

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):

2.

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.
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: The offsite tributary, RPW 2, appears as a blue line stream on topo maps, is a named stream
(King Branch), and has a drainage area of approximately 1050 acres, including approximately 104.2 acres of abutting
and non-abutting wetlands. For these reasons, RPW 2 was determined to be 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.	No	n-RPWs 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
	ш	TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
		11 W is jurisdictional. Data supporting this conclusion is provided at section in.e.
	Pro	vide 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.	Wo	tlands directly abutting an RPW that flow directly or indirectly into TNWs.
٦.		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: .
		■ W. d. L. P. d. L. W. DDW L. C. L. C. H. C. W. H. Z. D. C. L. C. L. C. d. C. L. C.
		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:
		douting an Rt W.
	Pro	vide acreage estimates for jurisdictional wetlands in the review area: acres.
_		
5.	We	tlands 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.
		conclusion is provided at section in.e.
	Pro	vide acreage estimates for jurisdictional wetlands in the review area: Onsite Wetland B: 2.69 acres.
6.	We	tlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
	ш	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.
	Pro	vide estimates for jurisdictional wetlands in the review area: acres.
-	T	
7.		poundments of jurisdictional waters. ⁹ 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).
	Exp	lain:
		TED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
		DATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY
		VATERS (CHECK ALL THAT APPLY): 10 ch are or could be used by interstate or foreign travelers for recreational or other purposes.
		which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
		th are or could be used for industrial purposes by industries in interstate commerce.
	Inter	state isolated waters. Explain: .
	Othe	er factors. Explain: .
T.J.o.	.4:F	water hade and arramanize retionals arrangeting determination.
ruel	шц	water body and summarize rationale supporting determination:
Prov	vide	estimates for jurisdictional waters in the review area (check all that apply):
		utary waters: linear feet width (ft).

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.

	_ 1	er non-wetland waters: Identify type(s) of waters: tlands: acres.	acres.		
F.	☐ If p We Rev ☐ Wa	potential wetlands were asse- etland Delineation Manual a- view area included isolated v Prior to the Jan 2001 Supr "Migratory Bird Rule" (M	ssed within the review area, the nd/or appropriate Regional Supvaters with no substantial nexuseme Court decision in "SWANOBR).	ADS (CHECK ALL THAT APPLY): esse areas did not meet the criteria in the 1987 Corpoplements. us to interstate (or foreign) commerce. CC," the review area would have been regulated by such a finding is required for jurisdiction. Explain:	ased solely on the
		approximately 6-8 feet d the site visit was made at observed within the linea visit for another jurisdic conveyance was full of w evidence of relatively per	eep and 10 feet wide. The lin- fer approximately 24" of pre or conveyance was being pum tional determination on the s ater, it appears to have been	within the project review area. The linear feature are feature was full of water at the time of the secipitation fell in the area. In addition, it appear uped in from the adjacent mining ponds. Durin same property, the linear conveyance was dry. Vexcavated from uplands, did not display an OH sons, the linear conveyance was determined to b CWA.	ite visit; however, ed that the water g a previous site While the linear W mark, or
Three (3) ponds that are a result of active sand mining activities in uplands are located within the project of the mining operations are associated with SCDHEC Mining Permit # 1-001670. As stated in the Preamble November 13, 1986, Regulations found on page 41217 (Federal Register vol. 51 No. 219) "waterfilled depres created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtained, or gravel unless and until the construction or excavation operation is abandoned and resulting body meets the definition of waters of the United States" are generally not considered waters of the U.S. For the theorem in the project waters of the U.S. For the three mining ponds were determined to be non-jurisdictional and not regulated by Section 404 of the Conon-jurisdictional ponds are shown on the survey plat. One pond constructed for stormwater purposes is also present within the project review area. The pond as have been excavated from uplands for the purposes of stormwater management. It consists of open waters not meet the three parameters of a wetland. The pond is associated with SCDHEC NPDES Permit # SCR1 these reasons, the stormwater pond was determined to be non-jurisdictional and not regulated by Section 4 CWA. The non-jurisdictional pond is shown on the survey plat.				amble to the depressions of obtaining fill, body of water or these reasons,	
				vaters and does SCR10F979. For	
		hydrologic connection fo		ictional, the linear conveyance and several pond he project review area. The details of the hydro in Section III of this form.	
	factors (judgmer No Lal Ott		irds, presence of endangered sp	ew area, where the sole potential basis of jurisdiction pecies, use of water for irrigated agriculture), using width (ft). esource:	
	a finding No Lal	acreage estimates for non-jug is required for jurisdiction on-wetland waters (i.e., rivers kes/ponds: acres. her non-wetland waters: etlands: acres.	(check all that apply):	ew area that do not meet the "Significant Nexus" stawidth (ft). resource:	andard, where such
A.	and requ Ma Da	uested, appropriately referen aps, plans, plots or plat subm ta sheets prepared/submitted Office concurs with data sh	ce sources below): itted by or on behalf of the app by or on behalf of the applicar cets/delineation report. data sheets/delineation report.	ply - checked items shall be included in case file an olicant/consultant: Sabine and Waters, Inc. nt/consultant. Concurs with conclusions.	nd, where checked

	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:
\boxtimes	USDA Natural Resources Conservation Service Soil Survey. Citation: Lynchburg. Norfolk, Goldsboro
\boxtimes	National wetlands inventory map(s). Cite name: PFO1
	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): .Berkeley 2006, Google 2014
	or Other (Name & Date):
\boxtimes	Previous determination(s). File no. and date of response letter: SAC-2014-01294
	Applicable/supporting case law: .
	Applicable/supporting scientific literature: .
	Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetland B was determined to be jurisdictional and subject to regulation under Section 404 of the CWA. Five (5) mining and one stormwater pond were determined to be non-jurisdictional and not subject to regulation under Section 404 of the CWA. A linear conveyance was also determined to be non-jurisdictional and not subject to regulation under Section 404 of the CWA. The jurisdictional status of Wetland A is discussed on Form 1 of 2.