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.

SECTION I: DACKGROUND INFORMATION			
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): November 9, 2011		

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Charleston, Patten Seed Company, SAC 2010-01330-2JM C. PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Orangeburg Center coordinates of site (lat/long in degree decimal format): Lat. 33.44903 ° N, Long. -80.74288 °E. Universal Transverse Mercator: Name of nearest waterbody: Unnamed tributary to Middle Pen Swamp Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Edisto River Name of watershed or Hydrologic Unit Code (HUC): 3050206 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form. D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s): 7-7-2011, 10-20-2011 **SECTION II: SUMMARY OF FINDINGS** A. RHA SECTION 10 DETERMINATION OF JURISDICTION. There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: B. CWA SECTION 404 DETERMINATION OF JURISDICTION. There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required] 1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): 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: 4,050 linear feet: 15 width (ft) and/or 0.785 acres. Wetlands: 1.196 acres. c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known): 2. Non-regulated waters/wetlands (check if applicable): ³ [Including potentially jurisdictional features that upon assessment are NOT waters or wetlands] Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: There are 38.873 feet of upland dug man-made conveyances on the subject property. These are 15 to 30 feet wide and 3 to 8 feet deep. All of these ditches carry run off from a combination of the largest pivot irrigation system

CECTION I. DACIZODOUND INFORMATION

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.

east of the Mississippi River as well as spray irrigation in areas where nursery plants are held. Since these features were dug from uplands and are fed by wells, they were determined to be non-jurisdictional. There are also two upland dug irrigation ponds on the subject property that were also found to be non-jurisdictional. One, near the northwest corner of the property, is 0.321 acres, and the other near the center of the western boundary is 0.208 acres in size.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1.	TNW Identify TNW:	
	Summarize rationale supporting determination: .	
2.	Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":	

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

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

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

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

If the waterbody 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:

(ii)

Watershed size: 72,553 acres

Drainage area: 1,004 **acres** The drainage area was approximated for all tributaries that were evaluated as part of the Significant Nexus Determinations performed for this JD. This area was drawn based on apparent flow pathways and drainage areas associated with the subject relevant reach using USGS quad mapping, aerial photography, and observations of connectivity and direction of flow made in the field. The intended value of the drainage area map is to document the full collection of wetlands adjacent to the relevant reach, and not to assert that the mapping represents more than approximation with respect to actual area.

Average annual snowfall: 0 inches		
Phy	sical Characteristics:	
(a)	Relationship with TNW:	
	Tributary flows directly into TNW	

Average annual rainfall: 50 inches

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 2 tributaries before entering TNW.
	Project waters are 30 (or more) river miles from TNW. Project waters are 1 (or less) river miles from RPW. Project waters are 20-25 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 TNW ⁵ : Unnamed tributary of Middle Pen Swamp to Middle Pen Swamp to Four Hole Swamp to the Edisto River (TNW). Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: Channelized.
	Tributary properties with respect to top of bank (estimate): Average width: 15 feet Average depth: 3 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable. Presence of run/riffle/pool complexes. Explain: Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
(c)	Flow: Tributary provides for: seasonal flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Other information on duration and volume:
	Surface flow is: Discrete and confined. Characteristics: .
	Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply):
	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 Mean High Water Mark indicated by: Survey to available datum;

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.

			☐ fine shell or debris deposits (foreshore) ☐ physical markin ☐ physical markings/characteristics ☐ vegetation lines. ☐ tidal gauges ☐ other (list):	gs; changes in vegetation types.
	(iii)	Cha	hemical Characteristics: haracterize tributary (e.g., water color is clear, discolored, oily film; water quaexplain: Water generally clear, probably contains runoff from sod farm op lentify specific pollutants, if known:	
	(iv)	Biol	iological 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: Small minnows noted. Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Common Southeastern he	erptiles including frogs.
2.	Cha	aract	cteristics of wetlands adjacent to non-TNW that flow directly or indirectl	y into TNW
	(i)		hysical Characteristics: O General Wetland Characteristics: Properties: Wetland size: Wetland B - 0.547 acres Wetland C - 0.281 acres Wetland D - 0.301 acres Wetland E - 0.067 acres	
			Total – 1.196 acres Wetland type. Explain: Palustrine forested. Wetland quality. Explain: Generally high for secondary growth. Project wetlands cross or serve as state boundaries. Explain:	
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain:	
			Surface flow is: Discrete and confined Characteristics:	
			Subsurface flow: Unknown . Explain findings: Dye (or other) test performed:	
		(c)	 Wetland Adjacency Determination with Non-TNW: Directly abutting Wetlands C and D Not directly abutting Wetlands B and E Discrete wetland hydrologic connection. Explain: Wetlands B and 	E are both connected to the RPW by upland
cut	man-	made	de farm conveyances. Ecological connection. Explain: Separated by berm/barrier. Explain:	
		(d)	Proximity (Relationship) to TNW Project wetlands are 30 (or more) river miles from TNW. Project waters are 15-20 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 100 - 500-year flow	odplain.
	(ii)	Cha	hemical Characteristics: haracterize wetland system (e.g., water color is clear, brown, oil film on surface characteristics; etc.). Explain: clear. lentify specific pollutants, if known: unknown.	ce; water quality; general watershed
	(iii)		iological 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 findi	ngs:Common Southeastern herptiles.

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

All wetland(s) being considered in the cumulative analysis: 5

Approximately (51.806) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland B N	0.547	Wetland E N	0.067
Wetland C Y	0.281	Wetland D Y	0.301

Offsite Y 50.61

Summarize overall biological, chemical and physical functions being performed: The forested palustrine wetlands which are similarly situated and adjacent to the RPW are collectively performing functions consistent with the following: Biological – wetlands adjacent to the RPW include bottomland swamp wetlands. As such a broad variety of biological functions are being performed which include providing breeding grounds and shelter for aquatic herptile species, foraging areas for wetland dependent bird and mammal species, and important spawning areas for fish species that inhabit the main channel as adults. These wetlands are essential in providing organic carbon in the form of their collective primary productivity to downstream waters, resulting in the nourishment of the downstream food web. Chemical - Wetlands in the review area are providing the important collective functions of removal of excess nutrients which are contributed by runoff from the surrounding uplands, reducing nitrogen and phosphorus loading downstream, and effectively preventing oxygen depletion that can result from eutrophication. Some of the wetlands in this review area have been channelized historically which likely has reduced the effectiveness of some of the wetlands' nutrient removal function. Physical – Wetlands in the review area are collectively performing flow maintenance functions including retaining runoff inflow and temporary flood water storage. Flow maintenance results in the reduction of downstream peak flows (discharge and volume), helping to maintain seasonal flow volumes

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

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

Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: A significant nexus was conducted on this portion of the subject property since the wetlands are adjacent to, but do not abut the unnamed tributary to Middle Pen Swamp (RPW) that flows away from the project boundary. The subject property is part of the Edisto River Basin which encompasses 30 watersheds and 2 million acres. The Four Hole Swamp watershed which includes this portion of the subject property is 72,553 acres in size. The Four Hole Swamp watershed includes two counties, Orangeburg and Dorchester. The Orangeburg County soil survey, USGS quad maps, and aerial infra-red photos were reviewed to determine how the subject property fits into the context of its relevant reach, Four Hole Swamp and the Edisto River. The relevant reach for this portion of the property includes approximately 52 acres of wetlands draining into the Edisto River. These wetlands represent approximately 95% of the wetlands in the 1,004 acre drainage area. The subject relevant reach is approximately 48 miles from the receiving Edisto River, a TNW. 1.981 acres are addressed on this JD sheet. 0.321 acres of isolated, non-jurisdictional wetlands are addressed on JD sheet 2. This JD sheet addresses wetlands B, C, D, and E which are adjacent to and drain to the unnamed tributary to Middle Pen Swamp, a named tributary to the Edisto River. The unnamed tributary is shown as named blue line stream on the USGS quad map. The stream is approximately 2.172 miles long and visible on aerial photos as a distinct band of wetland vegetation, therefore was considered to be a RPW. The unnamed tributary flows northeast to Middle Pen Swamp (RPW) east to Four Hole Swamp (RPW) and then south to the Edisto River, a TNW which drains into the Atlantic Ocean. Impacts to this relevant reach have been primarily limited to scattered residential homes and long term agricultural activities in the surrounding uplands. The forested palustrine wetlands which are similarly situated and adjacent to the perennial RPW are collectively performing functions consistent with the following: Biological – wetlands adjacent to the RPW include bottomland swamp and depressional wetlands. As such a broad variety of biological functions are being performed which include providing breeding grounds and shelter for aquatic species, foraging areas for wetland dependent species, and important spawning areas for fish species that inhabit the main channel as adults. These wetlands are essential in providing organic carbon in the form of their collective primary productivity to downstream waters, resulting in the nourishment of the downstream food web. Chemical -Wetlands in the review area are providing the important collective functions of removal of excess nutrients which are contributed by runoff from the surrounding uplands, reducing nitrogen and phosphorus loading downstream, and effectively preventing oxygen depletion that can result from eutrophication. Some of the adjacent wetlands in this review area have been ditched which likely has reduced the effectiveness of some of the wetlands' nutrient removal function. Physical – Wetlands in the review area are collectively performing flow maintenance functions including retaining runoff inflow and temporary flood water storage. Flow maintenance results in the reduction of downstream peak flows (discharge and volume), helping to maintain seasonal flow volumes. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of the Edisto River, this office has determined that there is a Signifcant Nexus between the review area Relevant Reach and its adjacent wetlands and the downstream TNW.

4. .

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

ТН	AT 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: The unnamed tributary is shown as a blue line stream on the USGS Quad map and showed continuous flow in the field. ☑ 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: 4,050 linear feet 15 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.

⁸See Footnote # 3.

	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 C and D border the unnamed tributary to Middle Pen Swamp. ✓ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.582 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.614 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.	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).
SUC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
Ide	ntify water body and summarize rationale supporting determination:
	vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.

Wetland Delineation Manual and/or appropriate Regional Supplements.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

E.

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers

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.

	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): There are 38,873 feet of upland dug man-made conveyances on the subject property. These are 15 to 30 feet wide and 3 to 8 feet deep. All of these ditches carry run off from a combination of the largest pivot irrigation system east of the Mississippi River as well as spray irrigation in areas where nursery plants are held. Since these features were dug from uplands and are fed by wells, they were determined to be non-jurisdictional. There are also two upland dug irrigation ponds on the subject property that were also found to be non-jurisdictional. One, near the northwest corner of the property, is 0.321 acres, and the other near the center of the western boundary is 0.208 acres in size.
fact	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such adding 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. SUP	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant. Chris Daves/S&ME, Inc Data sheets prepared/submitted by or on behalf of the applicant/consultant. Chris Daves/S&ME, Inc Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: 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: Indian Camp Branch. USDA Natural Resources Conservation Service Soil Survey. Citation: Orangeburg Soil Survey, page 40. National wetlands inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): 99:11203:129. or Other (Name & Date): Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting case law: Applicable/supporting case law: Other information (please specify):

A. **B. ADDITIONAL COMMENTS TO SUPPORT JD:** This JD form documents the jurisdictional status of 1.981 acres of wetlands on the subject property as well as 50.61 acres off site. There is one non-jurisdictional freshwater wetland near this relevant reach and it is discussed on Form 2 of 2. The jurisdictional wetlands drain to an unnamed tributary to Middle Pen Swamp (RPW) northeast to Middle Pen Swamp (RPW) east to Four Hole Swamp (RPW) and then south to the Edisto River, a TNW. All of the jurisdictional wetlands are non-abuting, therefore a Significant Nexus Determination was performed. This SND includes wetlands on site as well as those associated more closely with the unnamed tributary to Middle Pen Swamp drain to the Middle Pen Swamp drainage outside of the project boundary. Based on the documentation provided in Section III, C of this form, the nexus between the unnamed tributary and adjacent wetlands and the Edisto River, the downstream TNW, is a Significant Nexus and on this basis all wetlands documented on this form are within the jurisdiction of the Clean Water Act. There are 38,873 feet of upland dug man-made conveyances on the subject property. These are 15 to 30 feet wide and 3 to 8 feet deep. All of these ditches carry

run off from a combination of the largest pivot irrigation system east of the Mississippi River as well as spray irrigation in areas where nursery plants are held. Since these features were dug from uplands and are fed by wells, they were determined to be non-jurisdictional. There are also two upland dug irrigation ponds on the subject property that were also found to be non-jurisdictional. One, near the northwest corner of the property, is 0.321 acres, and the other near the center of the western boundary is 0.208 acres in size.