APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

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

SECTION I: BACKGROUND INFORMATION

REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): April 25, 2016 Α.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 2; SAC 2016-0031 L&S Farms

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: Clarendon City: Panola Center coordinates of site (lat/long in degree decimal format): Lat. 33.6634° N, Long. -80.3891° W. Universal Transverse Mercator:

Name of nearest waterbody: Chapel Creek

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

Name of watershed or Hydrologic Unit Code (HUC): Lake Marion- Santee River: 0305011101

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): January 26, 2016

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: Jurisdictional Ditch A= 2178.6 lf; Jurisdictional Ditch B= 3398.2 lf; Jurisdictional Ditch C= 6113.2 lf; Jurisdictional sRPW Trib A= 4603.4 lf; Total= 16.293.4 linear feet: width (ft) and/or acres.

Wetlands: Jurisdictional Wetland 1= 14.5 ac; Jurisdictional Wetland 2= 21.2 ac; Jurisdictional Wetland 3= 18.0 ac; Jurisdictional Wetland 4= 0.25 ac; Jurisdictional Wetland 5=26.4 ac; Jurisdictional Wetland 6= 12.4 ac; Jurisdictional Wetland 7= 16.7; Total= 109.45 acres

- c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Established by OHWM. Elevation of established OHWM (if known):
- 2. Non-regulated waters/wetlands (check if applicable):³ [Including potentially jurisdictional features that upon

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).

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

Non-jurisdictional Ditch A (725 lf), Non-jurisdictional Ditch B (3498 lf), Non-jurisdictional Ditch C (1083 lf), Nonjurisdictional Ditch D (2156 lf), Non-jurisdictional Ditch E (4081 lf), Non-jurisdictional Ditch F (1255 lf), Nonjurisdictional Ditch G (1563 lf), Non-jurisdictional Ditch H (375 lf), Non-jurisdictional Ditch I (511 lf) were determined to be non-jurisdictional drainage ditches because they were constructed in uplands for the purposes of conveying and/or draining agricultural fields. The features do not drain or connect any waters of the US and continue to be used for agricultural purposes. These features do serve as water conveyance and have a connection to the downstream TWN via a series of onsite tributaries.

The site contains lands that are currently in use for agriculture. Within these agricultural fields, multiple areas showed evidence of wetland hydrology and hydric soils, however hydrophytic vegetation has been removed by the farming operation. All 3 wetland criteria may return if the farming operation were to be abandoned. The farmer obtained a delineation from NRCS on August 18, 2015. The farmer is a current FSA Farm Program participant.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
 - (i) General Area Conditions: Watershed size: 351,157 acres; Drainage area: 45 acres Average annual rainfall: 51 inches

³ Supporting documentation is presented in Section III.F.

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

Average annual snowfall: 0 inches

(ii) Physical Characteristics:

Tributary is:

(a)

Relationship with TNW: ☐ Tributary flows directly into TNW. ⊠ Tributary flows through 2 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.
Project waters are 5-10 aerial (straight) miles from TNW.
Project waters are 7-10 aerial (straight) miles from TNW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: **The sRPW onsite flows directly into the onsite perennial RPW known as Chapel Creek. Chapel Creek flows into Jacks Creek which flows directly into Lake Marion, the downstream TNW**. Tributary stream order, if known:

(b) <u>General Tributary Characteristics (check all that apply):</u>

🗌 Natural

Artificial (man-made). Explain:

Manipulated (man-altered). Explain: The feature flows through an area that has a history of agriculture and includes ongoing agriculture. Areas of the tributary have been straightened and excavated to carry more water. Tributary properties with respect to top of bank (estimate):

Average width: **3-4** feet Average depth: **2-3** feet Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

🛛 Gravel

⊠ Silts	
Cobbles	
Bedrock	
Other. Explain:	

Concrete

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The tributary had relatively stable banks with no evidence of erosion or sloughing.

Presence of run/riffle/pool complexes. Explain: No run/riffle/pool complexes observed.

Vegetation. Type/% cover:

Tributary geometry: Relatively straight. A review of aerial photographs, topographic maps, and information

obtained during the site visit determined that this tributary flows between agricultural fields until it reaches Cook Branch. Tributary gradient (approximate average slope): 0-1 %

(c)	Flow:
(0)	<u>1 10 w.</u>

Tributary provides for: Seasonal flow

Estimate average number of flow events in review area/year: 11-20

Describe flow regime: The tributary provides seasonsal flow based on a review of aerials, topographic maps, and information obtained during the site visit. During the site visit, the tributary was observed as having flowing water. The amount of leaf litter and debris in the channel could not be seen due to the amount of water present.

Other information on duration and volume: This area had previously had a large rain event including flooding after Hurricane Joaquin.

Surface flow is: **Discrete and confined.** Characteristics: **Surface flow is restricted under normal conditions between the bed and bank of the tributary**.

Subsurface flow: Unknown. Explain findings:		
\Box Dye (or other) test performed: .		
Tributary has (check all that apply):		
Bed and banks		
OHWM ⁶ (check all indicators that apply):		
\boxtimes clear, natural line impressed on the bank		the presence of litter and debris
☐ changes in the character of soil		destruction of terrestrial vegetation
shelving	\boxtimes	the presence of wrack line
vegetation matted down, bent, or absent		sediment sorting

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.

 leaf litter disturbed or washed away sediment deposition water staining other (list): 	 scour multiple observed or predicted flow events abrupt change in plant community
Discontinuous OHWM. ⁷ Explain:	
	 he lateral extent of CWA jurisdiction (check all that apply): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Chemical Characteristics:	
Characterize tributary (e.g., water color is clear, discolored,	oily film; water quality; general watershed characteristics, etc.).

Explain: : During the site visit, the tributary was observed to have cloudy flowing water present; no oily film was observed. Land use in this watershed is comprised of 25.1% agricultural land, 24% forested land, 22.2% forested wetland (swamp), 21.6% water, 1.8% nonforested wetland (marsh), and 0.1% barren land.

Identify specific pollutants, if known: Because a portion of the watershed is comprised of agricultural land, the potential exists for herbicides and other pesticides, as well as runoff from land disturbing activities such as plowing and harvesting, to enter the on-site tributary. Because agricultural lands require regular manipulation of the soils, agricultural activities can create an increase in suspended sediments in the downstream tributaries.

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

Riparian corridor. Characteristics (type, average width): This tributary supports a riparian zone that contributes to the health of the aquatic system by filtering out pollutants and preventing erosion.

Wetland fringe. Characteristics: .

Habitat for:

(iii)

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: The tributary provides important aquatic habitat for wildlife and a travel corridor for aquatic fauna.

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

(i) Physical Characteristics:

- (a) General Wetland Characteristics:
- Properties:

Wetland size: acres Wetland type. Explain: . Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain:

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

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

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

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

□ Not directly abutting

Discrete wetland hydrologic connection. Explain:

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

(d) <u>Proximity (Relationship) to TNW</u>

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

(ii) Chemical Characteristics:

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

Identify specific pollutants, if known:

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

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

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

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



Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

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

- Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into 2. 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 3. 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:

The on-site seasonal RPW is performing important biological, chemical, and physical functions within a watershed comprised primarily of agricultural land use. The biological functions being performed include providing breeding grounds and shelter for aquatic animals and diversifying the plant life within the watershed. As a result, the waters of the US in the drainage area supply food sources for a variety of water dependent species, such as invertebrates, amphibians, reptiles and mammals. This tributary is essential in providing organic carbons in the form of their collective primary productivity to downstream waters, resulting in the nourishment of the downstream food web. The chemical functions being performed consist of the removal of excess pollutants, which are contributed by runoff from the surrounding uplands, from the downstream TNW. This reduces nitrogen and phosphorus loading downstream and effectively prevents oxygen depletion that can result from eutrophication. Physically, the tributary helps reduce stormwater flow. Not only does this prevent the accumulation of sediment downstream, which can smother fish and other aquatic wildlife, but it also reduces the amount of pollutants downstream because these pollutants are usually transported by sediment particles. This seasonal RPW temporarily stores flood waters and reduces downstream peak flows. This helps 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 Lake Marion, it has been determined that there is a significant nexus between the relevant reach of the seasonal RPW and the downstream TNW.

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

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: 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: Based on a review of aerial photography, topographic and NWI maps, and observation during a site visit, it was determined that Jurisdictional Ditch A, Jurisdictional Ditch B, and Jurisdictional Ditch C have perennial flow. The tributaries flow into Chapel Creek which flows into Jacks Creek and into the downstream TNW, Lake Marion.

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: Tributary A provides seasonal flow based on a review of aerials, topographic maps, and information obtained during the site visit. During the site visit, the tributary was observed as having flowing water. The amount of leaf litter and debris in the channel could not be seen due to the amount of water present.

Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: Jurisdictional Ditch A= 2178.6 lf: Jurisdictional Ditch B= 3398.2 lf: Jurisdictional Ditch C= 6113.2

- If: Jurisdictional sRPW Trib A= 4603.4 lf: Total= 16.293.4 linear feet width (ft).
 - Other non-wetland waters: acres. Identify type(s) of waters:

Non-RPWs⁸ that flow directly or indirectly into TNWs. 3.

Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
 - Identify type(s) of waters:
- Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. 4. \boxtimes
 - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Ketlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is

directly abutting an RPW: The wetlands onsite are directly adjacent and abutting RPWs. Jurisdictional Wetland 1, Jurisdictional Wetland 5 and Jurisdictional Wetland 6 are directly abutting RPWs which are located offsite. However, these features follow the same flow pattern as the onsite wetlands.

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: : Jurisdictional Wetland 1= 14.5 ac; Jurisdictional Wetland 2= 21.2 ac; Jurisdictional Wetland 3= 18.0 ac; Jurisdictional Wetland 4= 0.25 ac; Jurisdictional Wetland 5=26.4 ac; Jurisdictional Wetland 6= 12.4 ac; Jurisdictional Wetland 7= 16.7; Total= 109.45 acres.

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

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

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

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

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

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

7. Impoundments of jurisdictional waters.⁹

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

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

Explain:

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain:

Identify water body and summarize rationale supporting determination:

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

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

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

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based <u>solely</u> 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):

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*.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole 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). acres.
- Lakes/ponds:
 - Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands:.

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): width (ft). linear feet.
 - Lakes/ponds: acres.

Other non-wetland waters: acres. List type of aquatic resource:

Wetlands: acres.

SECTION IV: DATA SOURCES.

- A. SUPPORTING DATA. Data reviewed for JD (check all that apply checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
 - Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Maps prepared by consultant; Mr. J. Louis Jackson of GreenePond Consulting, LLC.
 - Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- Office concurs with data sheets/delineation report. This office generally concurs with the information presented on the data sheets prepared by the consultant.

- 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: Panola Quadrangle 7.5.
- USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey- Clarendon County
- National wetlands inventory map(s). Cite name: USFWS NWI Map- Clarendon County
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Google Earth Imagery and aerial imagery provided by consultant. or Other (Name & Date):
 - Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- \square Other information (please specify): Delineation from NRCS dated August 18, 2015.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Based on a review of aerial photography, topographic and NWI maps, and observation during a site visit, it was determined that Jurisdictional Ditch A, Jurisdictional Ditch B, and Jurisdictional Ditch C have perennial flow. The tributaries flow into Chapel Creek which flows into Jacks Creek and into the downstream TNW, Lake Marion. Tributary A provides seasonal flow based on a review of aerials, topographic maps, and information obtained during the site visit. During the site visit, the tributary was observed as having flowing water. The amount of leaf litter and debris in the channel could not be seen due to the amount of water present. The wetlands onsite are directly adjacent and abutting RPWs. Jurisdictional Wetland 1, Jurisdictional Wetland 5 and Jurisdictional Wetland 6 are directly abutting RPWs which are located offsite. However, these features follow the same flow pattern as the onsite wetlands.

Non-jurisdictional Ditch A (725 lf), Non-jurisdictional Ditch B (3498 lf), Non-jurisdictional Ditch C (1083 lf), Non-jurisdictional Ditch D (2156 lf), Non-jurisdictional Ditch E (4081 lf), Non-jurisdictional Ditch F (1255 lf), Non-jurisdictional Ditch G (1563 lf), Nonjurisdictional Ditch H (375 lf), Non-jurisdictional Ditch I (511 lf) were determined to be non-jurisdictional drainage ditches because they were constructed in uplands for the purposes of conveying and/or draining agricultural fields. The features do not drain or connect any waters of the US and continue to be used for agricultural purposes. These features do serve as water conveyance and have a connection to the downstream TWN via a series of onsite tributaries.

The site contains lands that are currently in use for agriculture. Within these agricultural fields, multiple areas showed evidence of wetland hydrology and hydric soils, however hydrophytic vegetation has been removed by the farming operation. All 3 wetland

criteria may return if the farming operation were to be abandoned. The farmer obtained a delineation from NRCS on August 18, 2015. The farmer is a current FSA Farm Program participant.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

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SECTION I: BACKGROUND INFORMATION

REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): April 25, 2016 Α.

DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 2 of 2; SAC 2016-0031 L&S Farms В.

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: Clarendon City: Panola Center coordinates of site (lat/long in degree decimal format): Lat. 33.6634° N, Long. -80.3891° W. Universal Transverse Mercator:

Name of nearest waterbody: Chapel Creek

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

Name of watershed or Hydrologic Unit Code (HUC): Lake Marion- Santee River: 0305011101

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): January 26, 2016

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 no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

- a. Indicate presence of waters of U.S. in review area (check all that apply): ¹
 - TNWs, including territorial seas
 - Wetlands adjacent to TNWs
 - Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 - Non-RPWs that flow directly or indirectly into TNWs
 - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 - Impoundments of jurisdictional waters
 - Isolated (interstate or intrastate) waters, including isolated wetlands
- b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands:.
- 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: Non-jurisdictional Wetland 8 (1.7 acres) was determined to be isolated and non-jurisdictional. This feature was determined to be a depressional wetland pocket surrounded completely by uplands currently used for agriculture. The wetland is positioned lower in the landscape than the adjacent uplands. There were no ditches, swales, or other linear features which would allow the conveyance of flow from the wetlands to the downstream TNW. No visible surface hydrologic connections between wetlands and waters of the U.S. appear to present. In addition, there is no apparent shallow subsurface hydrologic connection, and no apparent physical chemical, or biological connection to waters of the U.S. The wetland also has no apparent ecological interconnection to waters of the U.S. For these reasons, Non-jurisdictional Wetland 8 was determined to be isolated and non-jurisdictional and therefore not regulated by Section 404 of the CWA.

The site contains lands that are currently in use for agriculture. Within these agricultural fields, multiple areas showed evidence of wetland hydrology and hydric soils, however hydrophytic vegetation has been removed by the farming operation. All 3 wetland criteria may return if the farming operation were to be abandoned. The farmer obtained a delineation from NRCS on August 18, 2015. The farmer is a current FSA Farm Program participant.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i)	General Area Conditions:		
	Watershed size:	Pick 1	List ;
	Drainage area:	Pick I	List
	Average annual rain	nfall:	inches
	Average annual sno	wfall:	inches

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

(ii

i)		viscal Characteristics:	
	(a)	Relationship with TNW:	
		 Tributary flows directly into TNW. Tributary flows through Pick List tributaries before entering TNW. 	
		Project waters are Pick List river miles from TNW.	
		Project waters are Pick List river miles from RPW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Project waters are Pick List aerial (straight) miles from RPW.	
		Project waters cross or serve as state boundaries. Explain:	
		Identify flow route to TNW ⁵ :	
		Tributary stream order, if known:	
	()		
	(b) <u>General Tributary Characteristics (check all that apply):</u> Tributary is: Natural		
		$\square \text{ Artificial (man-made). Explain:}$	
		Manipulated (man-altered). Explain:	
		Tributary properties with respect to top of bank (estimate):	
		Average width:feetAverage depth:feet	
		Average side slopes: Pick List.	
		Primary tributary substrate composition (check all that apply):	
		Silts Sands 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:		
1		Tributary has (check all that apply): Bed and banks	
		\square OHWM ⁶ (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	
		☐ leaf litter disturbed or washed away ☐ scour ☐ sediment deposition ☐ multiple observed or predicted flow events	
		sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community	
		other (list):	
		Discontinuous OHWM. ⁷ Explain: .	

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

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.

High Tide Line indicated by:
oil or scum line along shore objects

Mean High Water Mark indicated by:

survey to available datum;

physical markings; fine shell or debris deposits (foreshore)

vegetation lines/changes in vegetation types.

- tidal gauges
- other (list):

(iii) Chemical Characteristics:

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

Identify specific pollutants, if known:

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

Riparian corridor. Characteristics (type, average width):

physical markings/characteristics

Wetland fringe. Characteristics:

Π Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

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

Physical Characteristics: (i)

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

Surface flow is: Pick List Characteristics:

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

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

- □ Not directly abutting
 - Discrete wetland hydrologic connection. Explain:
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

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

(ii) Chemical Characteristics:

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

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

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

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

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



Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

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

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

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

- TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
- 2. RPWs that flow directly or indirectly into TNWs.

Tributaries of TNWs where	ributaries typically flow year-round are jurisdictional. Provide da	ata 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-RPWs⁸ that flow directly or indirectly into TNWs.

Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

acres.

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

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

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

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

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

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

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

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

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

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

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

7. Impoundments of jurisdictional waters.⁹

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

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

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:

Explain:

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos*.

Identify water body and summarize rationale supporting determination: Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres. F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. \bowtie 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 sole 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: \square Wetlands: Non-jurisdictional Wetland 8: 1.7 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. SECTION IV: DATA SOURCES. A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Maps prepared by consultant; Mr. J. Louis Jackson of GreenePond Consulting, LLC. Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. This office generally concurs with the information presented on the data sheets prepared by the consultant. 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: Panola Quadrangle 7.5. USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey- Clarendon County. National wetlands inventory map(s). Cite name: USFWS NWI Map- Clarendon County. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): Google Earth Imagery and aerial imagery provided by consultant. or Other (Name & Date): Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: \square Other information (please specify): Delineation from NRCS dated August 18, 2015.

Other factors. Explain:

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Non-jurisdictional Wetland 8 (1.7 acres) was determined to be isolated and non-jurisdictional. This feature was determined to be a depressional wetland pocket surrounded completely by uplands currently used for agriculture. The wetland is positioned lower in the landscape than the adjacent uplands. There were no ditches, swales, or other linear features which would allow the conveyance of flow from the wetlands to the downstream TNW. No visible surface hydrologic connections between wetlands and waters of the U.S. appear to present. In addition, there is no apparent shallow subsurface hydrologic connection, and no apparent physical chemical, or biological connection to waters of the U.S. The wetland also has no apparent ecological interconnection to waters of the U.S. For these reasons, Wetland 8 was determined to be isolated and non-jurisdictional and therefore not regulated by Section 404 of the CWA.

The site contains lands that are currently in use for agriculture. Within these agricultural fields, multiple areas showed evidence of wetland hydrology and hydric soils, however hydrophytic vegetation has been removed by the farming operation. All 3 wetland criteria may return if the farming operation were to be abandoned. The farmer obtained a delineation from NRCS on August 18, 2015. The farmer is a current FSA Farm Program participant.