

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

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): January 18, 2018

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 1 of 1; SAC-2008-02041 17.43 Acre GPH Properties LP Tract

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: **Berkeley County** City: **Goose Creek**

Center coordinates of site (lat/long in degree decimal format): Lat. **33.0197° N**, Long. **-80.0377° W**.

Universal Transverse Mercator:

Name of nearest waterbody: **Sophia Swamp**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Back River**

Name of watershed or Hydrologic Unit Code (HUC): **03050201-07 (Cooper River)**

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): **August 29, 2017**

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: linear feet: width (ft) and/or acres.

Wetlands: **0.68** acres. (**Wetland A= 0.27 Acres & Wetland B= 0.41 Acres**)

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Pick List, Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³ [Including potentially jurisdictional features that upon assessment are NOT waters or wetlands]

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

Explain: **There are also two non-jurisdictional upland excavated borrow pits on site (Non-Jurisdictional Feature= 0.12**

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.

acres & Upland Excavated Pit= 0.02 acres). The feature that abuts Jurisdictional Wetlands A and B appear to have been excavated from uplands for the purpose of borrowing material but is not an active borrow area. The portion of the excavated area (Wetland A and B) have since naturalized and now meets the three parameters of a wetland. The remaining portion, “Non-Jurisdictional Feature”, consists of open water and does not meet the three parameters of a wetland. As stated in the Preamble to the November 13, 1986, Regulation 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. The borrow pits actively receive stormwater from the surrounding uplands. For these reasons, the two borrow pits were determined to also be non-jurisdictional and not regulated by section 404 of the Clean Water Act. There is also a small non-jurisdictional ditch (117 linear feet) on site that appears to be man-made and constructed in uplands. It does not transport relatively permanent flow, have an ordinary high water mark, or a defined bed and bank. It does, however, provide a hydrologic connection between Wetlands A and B and the perennial RPW located offsite.

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: 206,457 acres ;

Drainage area: 0.98 square miles (~627 acres). Drainage areas were approximated as part of the significant nexus determination performed for this JD. This area was drawn based on apparent flow pathways and drainage areas associated with the subject relevant reach using USGS mapping, aerial photography, and observation of connectivity and direction of flow made in the field.

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

Average annual rainfall: **52.96** inches

Average annual snowfall: **0** inches

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

- Tributary flows directly into TNW.
 Tributary flows through **3** tributaries before entering TNW.

Project waters are **5-10** river miles from TNW.

Project waters are **1 (or less)** river miles from RPW.

Project waters are **2-5** aerial (straight) miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: **Water from onsite wetlands connect via a ditch to an off-site RPW. This RPW flows through a culvert into an impoundment of the RPW. Through the outfall of the impoundment, water flows north into a system of RPW canals that flow northeast into the Back River.**

Tributary stream order, if known: **1st Order**.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:** Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: **The RPW has been channelized in the past.**

Tributary properties with respect to top of bank (estimate):

Average width: **3** feet

Average depth: **0.5** feet

Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

- | | | |
|--|---|-----------------------------------|
| <input checked="" type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input checked="" type="checkbox"/> Vegetation. Type/% cover: 20 | |
| <input type="checkbox"/> Other. Explain: . | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain: Banks are moderately stable, and show signs of erosion in places.**

Presence of run/riffle/pool complexes. Explain: **Due to channelization, presence of riffle/ pool complexes is virtually non-existent.**

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: **2-5**

Describe flow regime: **Tributary likely receives groundwater input, however most flow is likely directly related to storm events.**

Other information on duration and volume: **Water was observed in the channel, however no flow was observed during the field investigation.**

Surface flow is: **Confined.** Characteristics: **All surface flow is confined within the channelized RPW banks.**

Subsurface flow: **Unknown.** Explain findings: .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input checked="" type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input checked="" type="checkbox"/> the presence of litter and debris |
| <input checked="" type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |

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.

- vegetation matted down, bent, or absent
- leaf litter disturbed or washed away
- sediment deposition
- water staining
- other (list):
- Discontinuous OHWM.⁷ Explain: .
- sediment sorting
- scour
- multiple observed or predicted flow events
- 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
 - tidal gauges
 - other (list):
- Mean High Water Mark indicated by:
 - survey to available datum;
 - physical markings;
 - vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

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

Explain: **Water chemistry is unknown. Water observed in stagnant areas was clear.**

Identify specific pollutants, if known: .

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

- Riparian corridor. Characteristics (type, average width): .
- Wetland fringe. Characteristics: .
- Habitat for:
 - Federally Listed species. Explain findings: .
 - Fish/spawn areas. Explain findings: .
 - Other environmentally-sensitive species. Explain findings: .
 - Aquatic/wildlife diversity. Explain findings: **The tributary provides habitat for aquatic species that would utilize tributaries throughout the low country such as insects and amphibians along with the predators which feed upon them such as snakes, birds, mammals; even though it has been manipulated.**

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: **0.68 acres (Wetland A= 0.27 acres & Wetland B=0.41 acres)**

Wetland type. Explain: **The wetlands within the review area are palustrine forested, bottomland hardwood.**

Wetland quality. Explain: **Partially impaired due to manmade disturbance.**

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: The non-abutting wetland generally exhibits an intermittent flow relationship with the relevant reach. **Flow likely only occurs as a result of significant rainfall events.**

Surface flow is: **Discrete and confined** for non-abutting wetlands (Wetland A&B) through the non-jurisdictional ditch on site.

Characteristics: **Flow from Wetland A and B is intermittent and may occur seasonally and/or after rain events when surface water in the wetlands may be present.**

Subsurface flow: **Unknown**. Explain findings: .

- Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
- Discrete wetland hydrologic connection.** Explain: **Wetland A and B are adjacent to but not directly abutting the RPW offsite by means of the small non-jurisdictional ditch (117 linear feet).**
 - Ecological connection. Explain: .
 - Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **2-5** aerial (straight) miles from TNW.

⁷Ibid.

Flow is from: **Wetland to/from navigable waters.**
 Estimate approximate location of wetland as within the **50 - 100-year** 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: **Water color is clear with some evidence of algae and inputs of iron and organics.**
 Identify specific pollutants, if known: **There is no direct evidence of unnatural pollutants.**

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: **Bottomland hardwood. Forested species/ 50-100% FAC or wetter.**
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: **Forested wetlands are transitional habitats between terrestrial and aquatic habitats, and as such generally have high wildlife abundance and diversity. In addition, these habitats support great numbers of insects, which attract insect-feeding birds, amphibians, reptiles and mammals.**

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

All wetland(s) being considered in the cumulative analysis: **2**
 Approximately (**0.68**) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland A/ N	0.27		
Wetland B/ N	0.41		

Summarize overall biological, chemical and physical functions being performed: **The review area contains the headwaters of a large stream system that is comprised of perennial and seasonal tributaries, as well as abutting and adjacent wetlands, which are discussed as a whole on this JD Basis Form. The forested palustrine wetlands which are similarly situated and adjacent (both non-abutting) to the RPW are collectively performing functions consistent with the following: Biological – wetlands adjacent to the RPWs include forested palustrine 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 in particular, floodplain wetlands provide important spawning areas for 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 and developed areas, 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 storing flood water temporarily. 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 Back River, this office has determined that there is a Significant Nexus between the review area Relevant Reach and its adjacent wetlands and the downstream TNW.**

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:
4. **Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs:** The review area of approximately 0.98 square miles contains the headwaters of a large stream system that consists of two wetlands (Wetland A and B) that are adjacent to but not directly abutting an off-site seasonal RPW. As discussed previously throughout this JD Basis Form, Wetland A and B are adjacent to the sRPW by means of a non-jurisdictional ditch, which is a discrete, confined hydrologic connection. The forested palustrine wetlands which are similarly situated and adjacent (non-abutting) to the RPW are collectively performing functions consistent with the following: **Biological** – wetlands adjacent to the RPWs include forested palustrine 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 in particular, floodplain wetlands provide important spawning areas for 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 and developed areas, 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 storing flood water temporarily. 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 Back River, this office has determined that there is a Significant Nexus between the review area Relevant Reach and its adjacent wetlands and the downstream TNW.

According to the SCDHEC Watershed Assessment information available online, this watershed (03050201-07) is located in Berkeley, Charleston and Dorchester Counties and consists primarily of the Cooper River and its tributaries draining into the Charleston Harbour. Future growth is expected and is occurring in the watershed. There are two monitoring stations along Goose Creek, one upstream and one downstream of the project site. At the one downstream of the project site (MD-114) aquatic life uses are not supported due to dissolved oxygen excursions. Significant decreasing trends in five-day biological oxygen demand, turbidity, and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are fully supported. The project area is located within an area of Berkeley County that is being developed. Recent and ongoing development is visible in areas surrounding the project review area. Currently, the wetlands located within this drainage area are likely performing many of the services that wetlands and tributaries provide; however, when wetlands and tributaries are filled or altered, the services they provide may be compromised and the loss of those services affects downstream waters and TNWs, including the Back River. The wetlands within the review area have a significant nexus to downstream TNWs as they provide a source of carbon and nutrients, can provide water quality functions, can store excess water minimizing flooding impacts downstream, can maintain seasonal flow volumes, and can transport organisms, carbon, and nutrients. In addition, the wetlands within the review area are contributing to the relatively good water quality and integrity of 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:
- 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: **The unnamed seasonal tributary is located offsite. This RPW flows through a culvert into an impoundment of the RPW. Through the outfall of the impoundment, water flows north into a system of RPW canals that flow northeast into the Back River**

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):

- 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 jurisdictional. 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: **0.68** 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.

⁸See Footnote # 3.

⁹To 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.

- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination:

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

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

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

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
Other: (explain, if not covered above): **There are also two non-jurisdictional upland excavated borrow pits on site (Non-Jurisdictional Feature= 0.12 acres & Upland Excavated Pit= 0.02 acres). The feature that abuts Jurisdictional Wetlands A and B appear to have been excavated from uplands for the purpose of borrowing material but is not an active borrow area. The portion of the excavated area (Wetland A and B) have since naturalized and now meets the three parameters of a wetland. The remaining portion, "Non-Jurisdictional Feature", consists of open water and does not meet the three parameters of a wetland. As stated in the Preamble to the November 13, 1986, Regulation 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. The borrow pits actively receive stormwater from the surrounding uplands. For these reasons, the two borrow pits were determined to also be non-jurisdictional and not regulated by section 404 of the Clean Water Act. There is also a small non-jurisdictional ditch (117 linear feet) on site that appears to be man-made and constructed in uplands. It does not transport relatively permanent flow, have an ordinary high water mark, or a defined bed and bank. It does, however, provide a hydrologic connection between Wetlands A and B and the perennial RPW located offsite.**

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): **112** linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: **0.14** acres. List type of aquatic resource: **Upland Excavated Pits.**
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

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: **Figure 6: Delineated Waters of the United States Dorn Wetland Delineation TMS#: 2340000001, 2340000046 Goose Creek, South Carolina.**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **Figure 3. USGS Topo Map**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **Figure 4: NRCS Hydric Soils Map..**
- National wetlands inventory map(s). Cite name: **Figure 5- National Wetland Inventory Map.**
- State/Local wetland inventory map(s): .

- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
or Other (Name & Date): **Site Photographs May 31, 2017.**
- Previous determination(s). File no. and date of response letter: **SAC 81-98-3108(V) issued December 8, 1998 & SAC-2008-02041-2JY issued October 29, 2008.**
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: The site contains 0.68 acres of jurisdictional wetlands that are subject to regulation under Section 404 of the Clean Water Act. The site also contains 112 linear feet of non-jurisdictional ditch as well as two upland excavated borrow pits that are not subject to regulation under Section 404 of the Clean Water Act.