

**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

**B. DISTRICT OFFICE, FILE NUMBER, FILE NAME:** JD Form 1 of 1; SAC-2019-00021 Galleria Project Site

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: South Carolina County/parish/borough: **Horry County** City: **North Myrtle Beach**

Center coordinates of site (lat/long in degree decimal format): Lat. **33.775737° N**, Long. **-78.793963° W**.

Universal Transverse Mercator: **NAD 83**

Name of nearest waterbody: **Singleton Lake**

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

Name of watershed or Hydrologic Unit Code (HUC): **Coastal SC Drainage HUC: 03040208\_03**

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

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date:

Field Determination. Date(s): **December 14, 2018**

**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 328) 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.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):** <sup>1</sup>

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (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: **2.54** acres.

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

Elevation of established OHWM (if known):

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 Section III.B.2 and Section III.D.1.; otherwise, see Section III.B below.

**1. TNW**

Identify TNW: **Singleton Swash.**

Summarize rationale supporting determination: **Singleton swash is subject to the ebb and flow of the tide.**

**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, to 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" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g. 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but a tributary with (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. The 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 waterbody, though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> 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 will consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that is used for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.2 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, on 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 List**;  
Drainage area: **Pick List**;  
Average annual rainfall: \_\_\_\_\_ inches  
Average annual snowfall: \_\_\_\_\_ inches

**(ii) Physical 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.

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

- Tributary** is:  Natural  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain:

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

- Average width: feet  
Average depth: feet  
Average side slopes: **Pick List**

Primary tributary substrate composition (check all that apply):

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime:

Other information on duration and volume:

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

Subsurface flow: **Pick List** Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- |   |   |
|---|---|
| <input type="checkbox"/> Bed and banks  |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply): |   |
| <input type="checkbox"/> clear, natural line impressed on the bank            | <input type="checkbox"/> the presence of litter and debris          |
| <input 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                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent              | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                 | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                  | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining                                       | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list):  |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain:            |   |

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

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types  |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list):                             |  |

(iii) **Chemical Characteristics:**

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

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

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

2. **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) 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 water 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**

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)



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 its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of the TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency 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 between the tributary and its adjacent wetland or between a tributary and the TNW. Similarly, the fact an adjacent wetland is located 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 *Rapanso Creek* case study 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 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 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 a TNW.** 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 a TNW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with 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:**

**connected by a solid blue line feature. A solid blue line on USGS topographic maps is the symbol for perennial flow. A review of aerial photographs and SC LiDAR reveals the signature of a tributary that is impounded in several places. NWIs depict the feature as an impoundment.**

- 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 tributaries flow seasonally:

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

- Tributary waters: linear feet width (ft).  
 Other non-wetland waters: acres.

Identify type(s) of waters:

**3. Non-RPWs<sup>8</sup> 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 wetlands directly abutting an RPW: **Wetlands on site directly abut the offsite pRPW. A site visit on December 1, 2014 revealed not natural or man-made barriers that would obstruct the chemical, physical, and/or biological connection between the wetland and the RPW.**

- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributaries flow seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetlands directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: **2.54** 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: \_\_\_\_\_ acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

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:**



- 100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): **Horry County Aerial Index 99:11226:54, SCDNR Near Infrared 2018 Earth 2018..** or  Other (Name & Date): **Site photos submitted by the agent dated November 2018..**
- Previous determination(s). File no. and date of response letter: **SAC 81-2000-1800 issued 3/29/01 and SAC 81-2000-1800 issued 1/19/06.**
- Applicable/supporting case law: \_\_\_\_\_
- Applicable/supporting scientific literature: \_\_\_\_\_
- Other information (please specify): **SC Statewide LiDAR Aquisition 2009 LiDAR data.**

**B. ADDITIONAL COMMENTS TO SUPPORT JD: This form addresses a 16.62 acre site that was determined to be jurisdictional freshwater wetlands. Wetlands onsite are separated from uplands by an obvious topographic break directly abut an offsite impoundment of a pPRW (Singleton Lake). Singleton Lake drains in to Singleton Swash a t**