

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): July 20, 2021

ORM Number: SAC-2021-00175

Associated JDs: N/A Review Area Location¹:

State: SC City: Goose Creek County: Berkeley County

Center Coordinates of Review Area: Latitude 33.025619 Longitude -80.023261

II. FINDINGS

А.	Summary: Check all that apply. At least one box from the following list MUST be selected. Complete
	the corresponding sections/tables and summarize data sources.
	☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features,
	including wetlands, of any kind in the entire review area). Rationale: N/A.
	☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction
	within the review area (complete table in section II.B).
	☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review
	area (complete appropriate tables in section II.C).
	There are waters or water features excluded from Clean Water Act jurisdiction within the review

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

area (complete table in section II.D).

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A	N/A	N/A	N/A

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters)³

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	(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination	
	N/A	N/A	N/A	N/A	

Tributaries ((a)(2) waters):

(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
T1: 1-5	271 feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year	Historic imagery and current LiDAR data shows that this ditch was constructed within the original alignment of a perennial tributary. This feature exhibits an intermittent flow regime and contributes surface water flow to Back River, an (a)(1) water. See Section III.C for more information.
T2: 1-10	200 feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year	This feature is a relocated perennial tributary to Sophia Swamp, which provides surface water flow in a typical year to Back River, an (a)(1) water. See Section III.C for more information.
T3: 1-12	374 feet	(a)(2) Perennial tributary contributes surface water flow directly or	This feature is a relocated perennial tributary to Sophia Swamp, which provides surface water flow in a typical

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⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



indirectly to an (a)(1) water in a	year to Back River, an (a)(1) water. See Section III.C
typical year	for more information.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):

(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A	N/A	N/A	N/A

Adjacent wetlands ((a)(4) waters):

(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
W1: 1-58	0.62 acre	(a)(4) Wetland abuts an (a)(1)-(a)(3)	This feature abuts an (a)(2) water (T2: 1-10) and meets
		water	the adjacency criteria defined at 33 CFR 328.3(c)(1).
			See Section III.C for more information.
W1: 1-84	1.65 acres	(a)(4) Wetland abuts an (a)(1)-(a)(3)	This feature abuts an (a)(2) water (T1: 1-5) and meets
		water	the adjacency criteria defined at 33 CFR 328.3(c)(1).
			See Section III.C for more information.

D. Excluded Waters or Features

Excluded waters $((b)(1) - (b)(12))^4$:

Exclusion Name	Exclusion Size	Exclusion⁵	Rationale for Exclusion Determination
W4: 1-15	0.29 acre	(b)(1) Non-adjacent wetland	This feature is separated from an (a)(2) tributary by a
			berm. However, this berm does not allow for a direct
			hydrologic surface connection in a typical year. See
			Section III.C for more information.

III. SUPPORTING INFORMATION

- **A. Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.
 - X Information submitted by, or on behalf of, the applicant/consultant: Request for Jurisdictional Determination (JD)/Delineation, submitted on 1/25/2021.

This information is and is not sufficient for purposes of this AJD.

Rationale: The submittal provided by the consultant did not provide sufficient information regarding the site conditions on the site, which are heavily disturbed.

Data sheets prepared by the Corps: Title(s) and/or date(s).

- New Thotographs: Site photos provided by the consultant (1/14/2021); Aerial Imagery from www.historicaerials.com (1957, 1971, 1994); Google Earth aerial imagery (7/8/2003, 1/28/2021).
- X Corps Site visit conducted on: June 15, 2021.

Previous Jurisdictional Determinations (AJDs or PJDs): N/A.

- **X** Antecedent Precipitation Tool: provide detailed discussion in Section III.B.
- X USDA NRCS Soil Survey: Berkeley County, South Carolina (Web Soil Survey).
- X USFWS NWI maps: NWI Wetlands Mapper, accessed 7/9/2021.
- X USGS topographic maps: Mount Holly 7.5' topographic map (1959, 2017).

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Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	National Hydrography Dataset
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	LiDAR data from the South Carolina Department of Natural Resources/USGS
Other Sources	N/A.

B. **Typical year assessment(s):** The Antecedent Precipitation Tool (APT) was run by the Corps to determine if a hydrologic connection occurs in a typical year. The APT provides information such as the Palmer Drought Severity Index (a measure of regional drought conditions), WebWIMP H2O Balance (a comparison of precipitation and evapotranspiration), and antecedent precipitation information for the 90 days prior to the date selected. The most recent aerial imagery for the area was taken on January 28, 2021 so the APT was ran for this date.

The APT showed that the area experienced normal precipitation conditions for the 90 days prior to January 28, 2021. The Palmer Drought Severity Index was listed as 'mild wetness', and the WebWIMP indicated that the area was in the wet season (precipitation is greater than evapotranspiration). Based on this information, the area was likely experiencing normal conditions in January 2021.

C. Additional comments to support AJD: The review area is centered on a former detention basin which was constructed sometime in the 1960's. Prior to the basin being built, a natural stream flowed through the review area from the southwest to the northeast, as shown on historic topographic maps and aerial imagery. This unnamed stream flowed into Sophia Swamp, which contributes flow to Back River (an (a)(1) water). Sometime in the 1980's, the basin was breached and allowed to drain. Later in the mid-2000's, a residential development was built north of the review area which resulted in Delmont Drive and several lots being built over the stream. However, the downstream connection to Sophia Swamp was maintained via a culvert that crosses under the development.

A review of recent aerial imagery found that several road crossings and culverts have been placed in the flow path between the review area and Back River. However, there is no evidence that these features prevent a hydrologic connection from occurring from the review area to Back River in a typical year. To confirm this, imagery from January 28, 2021 was reviewed for evidence of any ponding that would suggest a perched culvert or blocked flows. Since these waterbodies are perennial and conditions were normal on this date (see III.B), a hydrologic connection occurs in a typical year between the review area and Back River (an (a)(1) water).

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On June 15, 2021 the Corps conducted a site visit of the review area to determine the conditions on the site. During the site visit, two large wetlands with standing water (W1: 1-84 and W4: 1-15) were observed within the footprint of the former basin, with additional wetlands (W1: 1-58) located at the north end of the review area against the base of the residential development fill. A small ditch within the basin (T1: 1-5) was draining water from W1: 1-84 to the northern wetland (W1: 1-58). On the west edge of the review area, a larger ditch (T3 1-12) was observed carrying a fair amount of water north and out of the review area. However, this ditch loops back into the review area on the northern edge (identified as T2: 1-10) before continuing north under the residential development and connecting to Sophia Swamp.

The month of June is considered the dry season in coastal South Carolina. However, precipitation occurred 48 hours prior to the Corps site visit and the wetlands within the basin contained several inches of standing water. T1: 1-5 (the ditch within the basin) was flowing and draining water from Wetland W1: 1-84. Based on the amount of water observed, it is likely that Ditch T1 1-5 flows more than in direct response to precipitation (particularly during the wet season when the water table is higher) and exhibits at least an intermittent flow regime. Ditches T3 1-12 and T2 1-10 had a well-defined bed and bank and contained a good amount of clear, flowing water that originated offsite. Based on this observation, the size of the area drained, and the presence of a stream line in the NHD data, these two ditches are considered perennial.

Historical topographic maps and aerial imagery clearly show that the stream was present prior to the basin and has continued to flow into Sophia Swamp after it was breached. Currently, this stream is being conveyed through the review area in ditches T2: 1-10 and T3 1-12.

The Navigable Water Protection Rule defines an (a)(2) tributary as a perennial or intermittent river, stream or similar naturally occurring surface water channel that contributes flow to an (a)(1) water. The alteration or relocation of a tributary does not modify its jurisdictional status. Furthermore, tributaries do not lose their jurisdictional status if they contribute flow through a non-jurisdictional feature such as a culvert, dam or tunnel. Ditches can be considered jurisdictional features if they relocate a tributary, were constructed in a tributary, or were constructed within an (a)(4) adjacent wetland. Adjacent wetlands are considered jurisdictional under the Rule if they abut an (a)(1)-(a)(3) water, are inundated by such a water, or are physically separated by only a natural barrier or an artificial structure that allows for a hydrologic surface connection in a typical year (33 CFR 328.3(c)(1) and (c)(12)).

Based on this information, ditches T2: 1-10 and T3: 1-12 meet the definition of an (a)(2) tributary since they are a relocated tributary that indirectly contributes perennial flow to Back River (an (a)(1) water). However, historic areal imagery and current LiDAR data shows that Ditch T1: 1-5 also meets the (a)(2) tributary definition since it is located within the historic alignment of the stream and exhibits intermittent

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flows. Because T1: 1-5 provides a direct surface water connection to Wetland W1: 1-84, this wetland meets the adjacency criteria since it abuts an (a)(2) water.

Regarding Wetland W4: 1-15, there was no apparent surface water connection to any of the other ditches or wetlands. Since this wetland does not abut another jurisdictional feature, it is considered a (b)(1) non-adjacent wetland and is not jurisdictional under the Clean Water Act.

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