

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): August 30, 2021

ORM Number: SAC-2017-01548

Associated JDs: N/A Review Area Location¹:

State: SC City: Johns Island County: Charleston County

Center Coordinates of Review Area: Latitude 32.6934 Longitude -80.0153

II. FINDINGS

Α.	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 area (complete table in section II.D).

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

§ 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

Ī	(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
Ditch 1	88 feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year	Based on historic imagery and topographic maps, this feature was constructed within Wetland 1, which is an (a)(4) adjacent wetland. This feature also exhibits intermittent flows and contributes water to an (a)(1)
		Thater in a sypream year	water in a typical year, qualifying it as an (a)(2) tributary. See Section III.B-C for more information.

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

_	Lakes and ponds, and impoundments of jurisdictional waters ((a)(o) waters).				
	(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination	
	NI/A	N/A	N/Δ	N/Δ	

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

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(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination	
Wetland 1	0.46 acres	(a)(4) Wetland abuts an (a)(1)-(a)(3)	Wetland 1 directly abuts Ditch 1, which is an	
		water	intermittent (a)(2) tributary that contributes flow to an	
			(a)(1) water in a typical year. See Section III.C for	
			more information.	

D. Excluded Waters or Features

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

Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
Ditch 2	845 feet	(b)(5) Ditch that is not an (a)(1) or (a)(2) water, and those portions of a	Historic Imagery and topographic maps do not provide any evidence that this feature relocates a tributary, was
		ditch constructed in an (a)(4) water	constructed in a tributary, or was constructed within an
		that do not satisfy the conditions of	adjacent wetland. Therefore, this feature is an
		(c)(1)	excluded (b)(5) ditch.
Ditch 3	836 feet	(b)(5) Ditch that is not an (a)(1) or	Historic Imagery and topographic maps do not provide
		(a)(2) water, and those portions of a	any evidence that this feature relocates a tributary, was
		ditch constructed in an (a)(4) water	constructed in a tributary, or was constructed within an
		that do not satisfy the conditions of	adjacent wetland. Therefore, this feature is an
		(c)(1)	excluded (b)(5) ditch.
Ditch 4	829 feet	(b)(5) Ditch that is not an (a)(1) or	Historic Imagery and topographic maps do not provide
		(a)(2) water, and those portions of a	any evidence that this feature relocates a tributary, was
		ditch constructed in an (a)(4) water	constructed in a tributary, or was constructed within an
		that do not satisfy the conditions of	adjacent wetland. Therefore, this feature is an
		(c)(1)	excluded (b)(5) ditch.
Ditch 5	846 feet	(b)(5) Ditch that is not an (a)(1) or	Historic Imagery and topographic maps do not provide
		(a)(2) water, and those portions of a	any evidence that this feature relocates a tributary, was
		ditch constructed in an (a)(4) water	constructed in a tributary, or was constructed within an
		that do not satisfy the conditions of	adjacent wetland. Therefore, this feature is an
		(c)(1)	excluded (b)(5) ditch.
Ditch 6	432 feet	(b)(5) Ditch that is not an (a)(1) or	Historic Imagery and topographic maps do not provide
		(a)(2) water, and those portions of a	any evidence that this feature relocates a tributary, was
		ditch constructed in an (a)(4) water	constructed in a tributary, or was constructed within an
		that do not satisfy the conditions of	adjacent wetland. Therefore, this feature is an
		(c)(1)	excluded (b)(5) ditch.
Pond 1	0.48 acre	(b)(8) Artificial lake/pond	This feature was constructed in an area that was
		constructed or excavated in upland	uplands and were used for agricultural operations at the
		or a non-jurisdictional water, so long	time of construction. See III.C for more information.
		as the artificial lake or pond is not	
		an impoundment of a jurisdictional	
		water that meets (c)(6)	

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, received on July 28, 2021.

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This information *is* sufficient for purposes of this AJD.

Rationale: N/A.

Data sheets prepared by the Corps: N/A.

X Photographs: Ground photos provided by consultant (April 29, 2021); Google Earth aerial imagery (February 11, 1989; January 28, 2021); USGS aerial imagery provided by consultant (1994); Apple Maps 3D imagery (date unknown; retrieved on August 13, 2021). Aerial Imagery from www.historicaerials.com (1957, 1971, 1989)

Corps Site visit(s) conducted on: N/A.

X Previous Jurisdictional Determinations (AJDs or PJDs): *PJD SAC-2017-01548 (March 14, 2018).*

X Antecedent Precipitation Tool: <u>provide detailed discussion in Section III.B.</u>

X USDA NRCS Soil Survey: Web Soil Survey (accessed August 20, 2021).

X USFWS NWI maps: NWI Wetlands Mapper (accessed August 20, 2021).

X USGS topographic maps: Legareville 7.5' topographic map (1919,1943, 2020).

Other data sources used to aid in this determination:

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

B. Typical year assessment(s): In order to determine the flow regime of Ditch 1 and whether a surface flow connection exists between the features within the review area and the unnamed tidal tributary to Hut Creek, a typical year assessment was conducted.

In order to conduct the assessment, the Antecedent Precipitation Tool (APT) was used. The APT reports the Palmer Drought Severity Index (a measure of drought conditions on a regional scale), the WebWIMP H2O Balance (a comparison of precipitation and evapotranspiration rates), and a comparison of precipitation received during the previous 90 days at nearby weather stations against the 30-year rolling average (refer to the APT documentation for more information).

The APT was ran for two dates: January 28, 2021 and April 29, 2021. January 28th was the date when the most recent aerial imagery was captured in Google Earth and was used to determine if a downstream connection exists to an (a)(1) water. April 29th was the date when the consultant visited the site and took ground photos of Ditch 1, which was used by the Corps to determine the flow regime of that feature.

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January 28, 2021 Results and Downstream Connection Analysis:

The results for January 28, 2021 indicate that the Palmer Drought Severity Index was in mild wetness for the area while the WebWIMP H2O Balance reports that January is the wet season. Precipitation for the previous 90 days was reported to be normal when compared to the 30-year average and was recorded within the previous couple of days.

Based on this information, climatic conditions were normal on January 28th. In the aerial imagery reviewed, there is no evidence of ponded water or blocked flows other than in Pond 1, demonstrating that a typical year connection exists between the review area and the unnamed tidal tributary to Hut Creek.

April 29, 2021 Results and Flow Regime Determination for Ditch 1:

For April 29, 2021, the APT results indicate that the Palmer Drought Severity Index was in mild wetness for the area while the WebWIMP H2O Balance reports that April is the dry season. Precipitation for the previous 90 days was determined to be normal when compared to the 30-year average. Precipitation records provided by the consultant show that the last measurable precipitation (as measured in North Charleston, approximately 13 miles away) occurred five days prior. Based on this information, conditions were normal on this date.

The site photographs of Ditch 1 that were provided by the applicant show a fair amount of water which appears to be flowing. Precipitation records indicate that no rain had been observed in the 5 days prior to the site visit, which means that this feature was flowing more than in direct response to precipitation. Based on this information, Ditch 1 was determined to have at least an intermittent flow regime.

C. Additional comments to support AJD:

Wetland 1:

Wetland 1 is a wetland feature located in the southwestern corner of the review area which abuts Ditch 1 and Pond 1. Based on historic aerial imagery and topographic maps, the part of the review area where these three features are located has historically been a wetland. For example, the 1919 Legareville 7.5' map shows a blue line stream (or potentially a ditch) that crosses under River Road and into the southwestern corner of the review area. Additionally, topographic lines and lidar data show the entire southwestern corner of the review area being lower than the surrounding area, with a distinct stream channel or wetland area crossing Trucklands Road (east of Ditch 1) and connecting to an unnamed tidal tributary to Hut Creek (an (a)(1) water). In aerial imagery from 1957, the review area was mostly cleared except for this part of the review area, suggesting that it may have been too wet to support agriculture. Within the cleared areas, two ditches are shown within an extensive area of dark

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colored soil, which frequently indicates wetland soils or saturated conditions. NRCS soil survey data supports with most of the depressional area mapped as hydric soils (Wadmalaw fine sandy loam). This information suggests that Wetland 1 likely extended beyond its current boundaries to the north, west beyond River Road, and to the south where it connected to the unnamed tidal tributary to Hut Creek.

Ditch 1 (discussed below) is an (a)(2) tributary that is located within Wetland 1 on the east side of River Road and serves as the primary connections point between the wetlands and the unnamed tidal tributary to Hut Creek. Additionally, a second connection point to the unnamed tidal tributary likely exists through the historic connection point noted in lidar and imagery. Since the second connection point is located outside of the review area, information about this feature's current condition is limited. However, current aerial imagery shows a riprap lined outfall where this channel empties into the tidal tributary, suggesting that a surface flow connection regularly occurs through that route as well. Based on these two connection points, Wetland 1 directly abuts an (a)(2) tributary (Ditch 1) and an (a)(1) water (the unnamed tidal tributary to Hut Creek), qualifying it as an (a)(4) adjacent wetland under the Navigable Waters Protection Rule.

Pond 1:

Pond 1 is located to the north and directly adjacent to Wetland 1. Based on lidar data and ground photos, this feature directly abuts Wetland 1, has a surface water connection and contributes flow to an (a)(1) water (an unnamed tidal tributary to Hut Creek). However, based on aerial imagery from the 1970s and 1980s, Pond 1 was constructed in an area that in use for agricultural operations and had upland characteristics at the time of construction. Therefore, this feature qualifies as an excluded (b)(8) water.

Ditch 1:

Ditch 1 is a ditch feature that flows south along on the western side of the review area to an unnamed tidal tributary to Hut Creek (an (a)(1) water). This feature originates in Wetland 1, but also collects conveys water from the western side of River Road that it receives from a culvert under the road. Based on ground photos and a typical year assessment, this feature was determined to have an intermittent flow regime (see III.B for more information).

A review of lidar imagery and historic aerial imagery indicates that a portion of this feature was likely constructed in the uplands since the historic flow path from Wetland 1 to the unnamed tidal tributary was to the east (see the discussion for Wetland 1 for more information). However, based on the amount of water in this ditch shown in photographs and its lower elevation compared to the historic connection point, this feature has effectively relocated the original connection point of Wetland 1. 33 CFR 328.3(c)(1) states that a ditch may qualify as an (a)(2) tributary if is has an intermittent or

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perennial flow regime and relocates a tributary. Based on the information reviewed, Ditch 1 meets this requirement and qualifies as an (a)(2) tributary under the Navigable Waters Protection Rule.

Ditches 2 through 6:

Ditches 2 through 5 are a system of ditches that span from west to east across the review area. Ditch 6, which is oriented from north to south along the eastern review area boundary, collects flow from Ditches 2 through 5 and transports it south and out of the review area where it empties into an unnamed tidal tributary to Hut Creek.

In order for Ditches 2 through 6 to be jurisdictional under the Navigable Waters Protection Rule (NWPR), these features must have an intermittent or perennial flow regime and relocate a tributary, be constructed in a tributary, or be constructed in an adjacent wetland (33 CFR 328.3(c)(12)). Based on photographs provided in this request and information from a previous PJD issued for the review area in 2016, portions of these features have the requisite flow regime (particularly Ditch 6, which appears to be perennial and supports wetlands). However, a review of aerial imagery does not suggest that these features relocated a tributary or were constructed in a tributary or wetland since they appear to collect water only from the review area east of Pond 1. Furthermore, topographic maps do not show any evidence of streams or wetlands, and the soils in this area are mapped as being non-hydric (Edisto loamy fine sand). A review of historic aerial imagery also does not show any presence of wetlands (often indicated by vegetation or dark colored soils in cleared areas).

Based on this information, there is no evidence that Ditches 2 through 6 meet the criteria under the NWPR to qualify as (a)(2) tributaries. Therefore, these features are excluded (b)(5) ditches and are not subject to regulation under Section 404 of the Clean Water Act or Section 9 and 10 of the Rivers and Harbors Act.

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