



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 8/11/2021

ORM Number: SWG-2020-00776

Associated JDs: N/A

Review Area Location¹: State/Territory: Texas City: Houston County/Parish/Borough: Harris

Center Coordinates of Review Area: Latitude 29.8655 Longitude -95.4682

II. FINDINGS

A. 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 or describe rationale.
- ☐ 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				
(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	
Vogel Creek (E121-00-00)	1,750 linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Vogel Creek is a naturally occurring surface water channel that contributes surface water flow to an (a)(1) water in a typical year, is perennial, and flows as such in a typical year. Vogel Creek flows into White Oak Bayou another (a)(2) then into Buffalo Bayou an (a)(1) water. Flow regimes were determined based on review of referenced resources listed in sections IIIA and IIIB.	

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
White Oak Bayou (E100-00-00)	605	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	White Oak Bayou is a naturally occurring surface water channel that contributes surface water flow to an (a)(1) water in a typical year, is perennial, and flows as such in a typical year. White Oak Bayou flows into Buffalo Bayou an (a)(1) water. Flow regimes were determined based on review of referenced resources listed in sections IIIA and IIIB.

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.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
HCFCF (E121-01-00)	771	linear feet	(b)(10) Stormwater control feature constructed or excavated in upland or in a non-jurisdictional water to convey, treat, infiltrate, or store stormwater runoff.	This aquatic feature is a stormwater control feature that was constructed or excavated wholly in uplands and functions to collect, retain, and regulate stormwater flow. This feature does not contribute flow to jurisdictional waters in a typical year. This feature does not appear as a historical tributary on historic USGS maps or historic aerial photographs. This feature contributes ephemeral surface flows into Vogel Creek via a drop structure, where the Ordinary High Water Mark (OHWM) of this feature is 6.5-feet higher than the OHWM of Vogel Creek.

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.

☒ Information submitted by, or on behalf of, the applicant/consultant: **Johnson, Mirmiran & Thompson;**
Wetland and Waterbody Delineation; May 29, 2020

This information is sufficient for purposes of this AJD.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

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.



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

Rationale: [N/A](#)

- ☐ Data sheets prepared by the Corps: [N/A](#)
- ☒ Photographs: [Aerial and Other: Ground Photos collected on May 11, 2020; Aerial photographs dated 1930, 1944, 1953, 1962, 1969, 1979, 1989, 1995, 2005, and 2016.](#)
- ☐ Corps site visit(s) conducted on: [N/A](#)
- ☐ Previous Jurisdictional Determinations (AJDs or PJDs): [N/A](#)
- ☒ Antecedent Precipitation Tool: [*provide detailed discussion in Section III.B.*](#)
- ☒ USDA NRCS Soil Survey: [NRCS Soil Survey of Harris County, Texas \(1976\)](#)
- ☒ USFWS NWI maps: [USFWS NWI Data](#)
- ☒ USGS topographic maps: [Houston Heights, Tx. USGS Topo quad; 1915, 1947, 2013](#)

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	TNRIS LiDAR Data
Other Sources	FEMA 100-year floodplain; FEMA 10-year floodplain

B. Typical year assessment(s): [Water features were analyzed using the APT calculation for the base delineation map aerial photograph date of 28 OCT 17. The APT is a tool that affords the user the capability to look at rainfall in the recent past, cumulative for the last 3 months as well as climatological review for the past 30 years. The WETs score \(last 3 months\) for that date was 13 on a scale of 6-18 with a score of 10-14 indicating normal precipitation for the previous 3 months. This indicates that the measurements or observations made are reflective of normal climatic conditions. It uses climatic data collected from numerous nearby weather stations and produces the most reliable source with a full 30 years of precipitation data. The site coordinates are located at an elevation of approximately 73.25 ft. Even with extreme rainfall in September 2017 due to Hurricane Harvey \(45.9 inches\), the APT still calculated normal conditions for this date. Below are the results for 5 dates examined for this site.](#)

Date	Rain Prior 72 hours	WETS (3 mth) score	APT	Season	PDSI
11 MAR 16 (Google Earth)	0	14	Normal	Wet	Mild Wetness
28 OCT 17 (Base Map)	0	13	Normal	Wet	Extreme Wetness
11 FEB 19 (Google Earth)	0-1	13	Normal	Wet	Moderate Wetness
01 DEC 19 (Google Earth)	0-1	13	Normal	Wet	Incipient Drought
11 MAY 20 (Site Visit)	0-1	9	Drier than Normal	Dry	Mild Drought

[Climatic data was collected from Houston North Houston, Houston Indep Hts, Houston 4.7 WNW, Houston Spring Branch, Houston Hts, Spring valley 2.7 NW, and Bunker Hill village 3.6 NNW AP, which are the closest stations \(3.6 – 6.1 mi\) and are within the appropriate geographic region and are the most reliable](#)



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

sources with up to a full 30 years of data.

For four of the five randomly selected resources, the 30-day precipitation total fell within the 70th and 30th percentiles for totals from the same date range over the preceding 30 years; the APT calculated a condition of "Normal" for these dates. The fifth resource (May 11, 2020; date of Site Visit), showed a 30-day precipitation total lower than the 30th percentile for totals from the same date range over the preceding 30 years; the APT calculated a condition of "Drier than Normal" for this date.

- C. Additional comments to support AJD:** Harris County Flood Control District Gauge 585 maintains a log of stream elevation on Vogel Creek at Victory Drive, approximately 360-feet upstream of the project site. Surface water levels have been consistently logged at approximately 58-feet over the year preceding 10/20/20, therefore the flow regime of this water feature is perennial. Surface water from Vogel Creek flows into White Oak Bayou, then Buffalo Bayou, and ultimately into the San Jacinto River (an (a)(1) water).

Harris County Flood Control District Gauge 540 maintains a log of stream elevation on White Oak Bayou at Alabonson Drive, approximately 4,200-feet upstream of the project site. Surface water levels have been consistently logged at approximately 60-feet over the year preceding 10/20/20, therefore the flow regime of this water feature is perennial. Surface water from White Oak Bayou flows into Buffalo Bayou and then ultimately into the San Jacinto River (an (a)(1) water).

Vogel Creek (E121-00-00) and White Oak Bayou (E100-00-00) are perennial tributaries; as such per federal regulations 33 CFR 328.3 (a)(2), these aquatic features are jurisdictional waters that are subject to Section 404 of the Clean Water Act.

E121-01-00 is a stormwater control feature constructed in upland to convey, treat, infiltrate, and store stormwater runoff; as such per federal regulations 33 CFR 328.3 (b)(10) these aquatic features are non-jurisdictional waters and not subject to Section 404 of the Clean Water Act.