

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 11/9/2020

ORM Number: SWG-2017-00099

Associated JDs: SWG-2017-00099 (prior AJD)

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

Center Coordinates of Review Area: Latitude 29.637002 Longitude -95.080906

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

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

(complete table in Section II.D).

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

Tributaries ((a)(2) waters):							
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination			
N/A.	N/A. N/A.		N/A.	N/A.			

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.			

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.



D. Excluded Waters or Features

Excluded waters	Excluded waters $((b)(1) - (b)(12))$: ⁴						
Exclusion Name	Exclusion		Exclusion ⁵	Rationale for Exclusion Determination			
Wetland A	37.09	acre(s)	(b)(1) Non- adjacent wetland.	This wetland does not abut an $(a)(1) - (a)(3)$ water; is not inundated by flooding from an $(a)(1) - (a)(3)$ water in a typical year; is not physically separated from an $(a)(1) - (a)(3)$ water only by a natural berm, bank, dune, or similar natural feature; or is not physically separated from an $(a)(1) - (a)(3)$ water only by an artificial dike, barrier, or similar artificial structure.			
Wetland B	0.23	acre(s)	(b)(1) Non- adjacent wetland.	This wetland does not abut an $(a)(1) - (a)(3)$ water; is not inundated by flooding from an $(a)(1) - (a)(3)$ water in a typical year; is not physically separated from an $(a)(1) - (a)(3)$ water only by a natural berm, bank, dune, or similar natural feature; or is not physically separated from an $(a)(1) - (a)(3)$ water only by an artificial dike, barrier, or similar artificial structure.			
Wetland C	6.39	acre(s)	(b)(1) Non-adjacent wetland.	This wetland does not abut an $(a)(1) - (a)(3)$ water; is not inundated by flooding from an $(a)(1) - (a)(3)$ water in a typical year; is not physically separated from an $(a)(1) - (a)(3)$ water only by a natural berm, bank, dune, or similar natural feature; or is not physically separated from an $(a)(1) - (a)(3)$ water only by an artificial dike, barrier, or similar artificial structure.			
Pond 1	3.75	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	This man-made feature was constructed or excavated wholly in a non-jurisdictional area to hold and retain water, and is not an impoundment of a jurisdictional water, nor would it be anticipated to be inundated by surface floods waters of the nearest waters of the U.S. in a typical year.			
Pond 2	3.39	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-	This man-made feature was constructed or excavated wholly in a non-jurisdictional area to hold and retain water, and is not an impoundment of a jurisdictional water, nor would it be anticipated to be inundated by surface			

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.



Excluded waters $((b)(1) - (b)(12))$: ⁴							
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination			
			jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	floods waters of the nearest waters of the U.S. in a typical year.			
Pond 3	0.26	acre(s)	(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 man-made feature was constructed or excavated wholly in a non-jurisdictional area to hold and retain water, and is not an impoundment of a jurisdictional water, nor would it be anticipated to be inundated by surface floods waters of the nearest waters of the U.S. in a typical year.			

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: Previous wetland delineation report and significant nexus analysis submitted by ACCU Wetland Scientists, LLC, 1 February 2017; ephemeral connection.

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

Rationale: There are slight modifications and additions to the data submitted, based on the 31 March2017 and 2 June 2017 site visits.

- □ Data sheets prepared by the Corps: Site visits 31 March 2017 and 2 June 2017.

- ☑ Previous Jurisdictional Determinations (AJDs or PJDs): SWG-2017-00099 8 January 2018.
- Antecedent Precipitation Tool: <u>provide detailed discussion in Section III.B.</u>
- USDA NRCS Soil Survey: (http://casoilresource.lawr.ucdavis.edu/soil_web/kml/mapunits.kml), accessed 11 March 2019.
- □ USFWS NWI maps: (http:///www.fws.gov/wetlands/Data/Google-Earth.html), accessed 11 March 2019.
- USGS topographic maps: La Porte, Texas (1916, 1955, and 1982).

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	N/A.
Other Sources	Texas Water Development Board (TWDB), Texas Strategic Mapping Program (StratMap): Texas Upper Coast Light Detection and Ranging (LiDAR), 2018 1.0-Meter Bare Earth Digital Elevation Model (DEM), North American Vertical Datum 1988 (meters).; U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA): Flood Insurance Rate Map (FIRM), Montgomery County, Texas and Incorporated Areas, Panel Number 48339C0454G (08/18/2014); Flood Insurance Study (FIS) Number 48339CV006A, Montgomery County, Texas and Incorporated Areas, Volume 6 of 6.

B. Typical year assessment(s): The subject site is located outside the detailed mapping area for White Oak Creek West on the FEMA effective FIRM. Detailed floodplain mapping stops approximately 2,500 linear feet south of the subject site. Contemporary aerial imagery confirms that site conditions have not changed since the previous AJD. As such, we have verified that the site contains: 3 wetland polygons and 3 open waters ponds. A review of contemporary LiDAR elevation data reveals that that none of these aquatic features (per the FEMA FIS maps) are located in a contiguous landscape position that would be anticipated to be inundated by flooding by the nearest waters of the US in a typical year. The determination regarding potential inundation due to flooding by the nearst waterway is based largely upon scientific studies regarding floodplain correlation and elevation information for bank-full and floodplains (e.g. study entitled: Hydrogeomorphological differentiation between floodplains and terraces by: Qina Yan, Toshiki Iwasaki, Andrew Stumpf, Patrick Belmont, Gary Parker & Praveen Kuma.). These studies reveal that the 10-year floodplain base flood elevation is located slightly higher than bank-full elevation (which per regulation is anticipated to be within the typical year flooding and jurisdictional; but not to the 100-year floodplain). The wetlands on this site are not located in a detailed study mapped floodplain, nor located at an elevation that would be anticipated to be flooded in a typical year: they are at a minimum of 0.5 foot above the elevation of the 10-year floodplain base flood elevation. Wetland A extends off the site to the southeast into a broad ephemeral swale feature that extends to a concrete culvert under Sleepy Hollow Road. The culvert connects to an unnamed White Oak Creek West tributary. Based on water flow observations during the previous 2 June 2017 site visit, and historic aerial photos collected at times with rainfall recorded during the preceding 72 hours, the swale exhibits ephemeral flow in direct response to precipitation. The APT calculated hydrologic conditions for the reviewed historic aerial imagery and site visit dates are listed in Table 1 below.



TABLE 1 Date Rainfall Site Visits	APT	APT Condition	Season	PDSI	Preceding 72 hr
3/31/2017	13	Normal	Wet	Mod Drought	0
6/2/2017	12	Normal	Dry	Incip Wet	<2"
0/2/2017	12	Noma	Diy	iricip wet	<2
Google Eart	h				
1/31/2004	16	Wetter than Normal	Wet	Normal	~3"
1/14/2006	6	Drier than Normal	Wet	Extreme Droug	
1/8/2008	12	Normal	Wet	Mild Drought	0
3/31/2008	12	Normal	Wet	Incip Drought	<1"
1/7/2009	14	Normal	Wet	Mild Drought	<1/4"
1/8/2010	13	Normal	Wet	Normal	<1/4"
3/10/2011	12	Normal	Wet	Extreme Droug	
4/22/2012	13	Normal	Wet	Mod Drought	~1/2"
10/21/2012	10	Normal	Wet	Mild Drought	0
10/31/2013	16	Wetter than Normal	Wet	Mild Wet	>3"
2/14/2014	9	Drier than Normal	Wet	Incip Drought	~1/4"
4/8/2014	9	Drier than Normal	Wet	Mild Drought	~1/4"
7/31/2015	10	Normal	Dry	Severe Wet	0
2/2/2016	12	Normal	Wet	Mild Wet	0
3/3/2016	9	Drier than Normal	Wet	Severe Wet	0
1/23/2017	17	Wetter than Normal	Wet	Mild Drought	Trace
2/15/2017	16	Wetter than Normal	Wet	Mod Drought	~1/4"
8/30/2017	17	Wetter than Normal	Dry	Extreme Wet	>5"
10/28/2017	11	Normal	Wet	Incip Drought	0
4/10/2018	17	Wetter than Normal	Wet	Normal	<1"
2/23/2019	12	Normal	Wet	Severe Wet	~1/2"
12/1/2019	10	Normal	Wet	Mild Wet	<1/4"
NAIP					
10/16/2014	12	Normal	Wet	Mild Wet	~1/2"
9/28/2016	10	Normal	Dry	Incip Drought	~1/2"
10/4/2018	15	Wetter than Normal	Wet	Extreme Wet	~1/4"
TOP					
1/25/2015	9	Drier than Normal	Wet	Mild Wet	~1"
1,20,2010	J	2.101 Clair Hollian	*****	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•
Digital Globe	е				
8/14/2020	11	Normal	Dry	Mild Wet	0
10/2/2020	15	Wetter than Normal	Wet	Moderate Wet	0



The APT values for the previous site visits conducted 31 March and 2 June 2017 are 13 (normal) and 12 (normal), respectively. The APT values for the 2014, 2016, and 2018 NAIP, and 2015 TOP are 12 (normal), 10 (normal), and 15 (wetter than normal), and 9 (drier than normal), respectively. While the APT scores for Google Earth aerial imagery dated 31 January 2004, 31 October 2013, 23 January 2017, 15 February 2017, 30 August 2017, 10 April 2018, 4 December 2018, were 16, 16, 17, 16, 17, 17, and 15, respectively, indicating wetter than normal precipitation conditions. In none of the images noted above is the subject site inundated by overbank flooding from White Oak Creek West or the unnamed tributary. Therefore, based on the APT tool analysis, elevation information, floodplain information and scientific studies there is insufficient information to state that the aquatic resources on this site are inundated by overbank flooding from an (a)(1) – (3) water in a typical year.

C. Additional comments to support AJD: N/A or provide additional discussion as appropriate.

