



**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): 5/18/2021  
 ORM Number: SWG-2019-00491  
 Associated JDs: N/A  
 Review Area Location<sup>1</sup>: State/Territory: Texas City: Houston County/Parish/Borough: Houston  
 Center Coordinates of Review Area: Latitude 30.081830 Longitude -95.65032

**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)<sup>2</sup>**

§ 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):<sup>3</sup>

(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
SA016	3120	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Feature is a naturally occurring surface water perennial channel that contributes surface water flow to an (a) (2) water (Tributary to Willow Creek), then Willow Creek another (a) (2) water, then to the San Jacinto River (a) (1) water, and flows as such in a typical year. This flow regime was determined based on a review of site-specific information including, elevation data, aerial photos, site visit, and USGS topo maps.
SX001	466.4	linear feet	(a)(2) Perennial tributary	Feature is a naturally occurring surface water perennial channel that contributes surface water flow

<sup>1</sup> Map(s)/figure(s) are attached to the AJD provided to the requestor.  
<sup>2</sup> 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.  
<sup>3</sup> 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.



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(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
		contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	to an (a) (2) water (Tributary to Willow Creek), then Willow Creek another (a) (2) water, then to the San Jacinto River (a) (1) water, and flows as such in a typical year. This flow regime was determined based on a review of site-specific information including, elevation data, aerial photos, site visit, and USGS topo maps.

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
WA006	6.654 acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.
WA006b	0.173 acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	N/A.Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.
WA006c	0.205 acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.
WA010	0.899 acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.
WA011	0.370 acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.



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Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
			water in a typical year.	information including, elevation data, aerial photos, and USGS topo maps.
WA013	1.282	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.
WA020	0.114	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.
WX001	0.046	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Feature does not abut an a)1-a)3 water but is located in a landscape position that would be anticipated to be flooded in a typical year by a tributary of Willow Creek, an (a)(2) water. This was determined based on a review of site-specific information including, elevation data, aerial photos, and USGS topo maps.
WX002	0.174	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Feature is a fringe wetland that abuts (i.e., touches) at least one point or side of an (a)(1), (2), or (3) water, tributary to Willow Creek, an (a)(2) water. Emergent wetland located above and below OHWM of tributary and meets criteria (a)(4) as defined in 33 CFR 328.3.
WX003	0.172	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Feature is a fringe wetland that abuts (i.e., touches) at least one point or side of an (a)(1), (2), or (3) water, tributary to Willow Creek, an (a)(2) water. Emergent wetland located above and below OHWM of tributary and meets criteria (a)(4) as defined in 33 CFR 328.3.

**D. Excluded Waters or Features**

Excluded waters ((b)(1) – (b)(12)): <sup>4</sup>				
Exclusion Name	Exclusion Size		Exclusion <sup>5</sup>	Rationale for Exclusion Determination
WA006a	0.081	acre(s)	(b)(1) Non-adjacent wetland.	This feature does not abut an (a)(1)-(a)(3) water. It is not located in a landscape position that would be flooded/inundated by an (a)(1)-(a)(3) water during a typical year. It is separated from

<sup>4</sup> 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.

<sup>5</sup> 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.



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Excluded waters ((b)(1) – (b)(12)): <sup>4</sup>				
Exclusion Name	Exclusion Size		Exclusion <sup>5</sup>	Rationale for Exclusion Determination
				an (a)(1)-(a)(3) water by more than a single natural or man-made barrier.
WA006d	0.053	acre(s)	(b)(1) Non-adjacent wetland.	This feature does not abut an (a)(1)-(a)(3) water. It is not located in a landscape position that would be flooded/inundated by an (a)(1)-(a)(3) water during a typical year. It is separated from an (a)(1)-(a)(3) water by more than a single natural or man-made barrier.
WA008	0.068	acre(s)	(b)(1) Non-adjacent wetland.	This feature does not abut an (a)(1)-(a)(3) water. It is not located in a landscape position that would be flooded/inundated by an (a)(1)-(a)(3) water during a typical year. It is separated from an (a)(1)-(a)(3) water by more than a single natural or man-made barrier.
WA009	0.306	acre(s)	(b)(1) Non-adjacent wetland.	This feature does not abut an (a)(1)-(a)(3) water. It is not located in a landscape position that would be flooded/inundated by an (a)(1)-(a)(3) water during a typical year. It is separated from an (a)(1)-(a)(3) water by more than a single natural or man-made barrier.
SA010	85.5	linear feet	(b)(5) Ditch that is not an (a)(1) or (a)(2) water, and those portions of a ditch constructed in an (a)(4) water that do not satisfy the conditions of (c)(1).	The feature is a constructed or excavated channel used to convey water. The ditch does not meet the definition of an (a)(1) or (a)(2) water and was not constructed in an (a)(4) water. The ditch does not relocate a tributary nor is it constructed in a tributary.
SA015	0.262	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).	Feature was constructed or excavated wholly in upland or in non-jurisdictional waters and it is not an impoundment that meets the conditions of (c)(6). Based on historical topographic maps there is no evidence that the water is an impoundment of a jurisdictional water meeting the conditions of paragraph (c)(6).
SX002	0.240	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-	Feature was constructed or excavated wholly in upland or in non-jurisdictional waters and it is not an impoundment that meets the conditions of (c)(6). Based on historical topographic maps there is no evidence that the water is an impoundment



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Exclusion Name	Exclusion Size	Exclusion <sup>5</sup>	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).	of a jurisdictional water meeting the conditions of paragraph (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.

Information submitted by, or on behalf of, the applicant/consultant: [Wetland Delineation Report for the Proposed M124 Channel Improvement and Detention Basin Project Phase II in Harris County, Texas MARCH 23, 2020](#)

This information is sufficient for purposes of this AJD.

Rationale: [N/A or describe rationale for insufficiency \(including partial insufficiency\).](#)

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

Photographs: [Aerial and Other: Historical Aerials \(1978, 1989, 1995, 2002, 2004, 2006, 2012, 2016\), Site photos \(11-20-2019\)](#)

Corps site visit(s) conducted on: [Date\(s\).](#)

Previous Jurisdictional Determinations (AJDs or PJDs): [ORM Number\(s\) and date\(s\).](#)

Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)

USDA NRCS Soil Survey: [NRCS Soil Survey for Harris County, Texas \(USDA 2017\)](#)

USFWS NWI maps: [Title\(s\) and/or date\(s\).](#)

USGS topographic maps: [Rose Hill, Texas 7.5-minute topographic](#)

**Other data sources used to aid in this determination:**

Data Source (select)	Name and/or date and other relevant information
<a href="#">USGS Sources</a>	<a href="#">N/A.</a>
<a href="#">USDA Sources</a>	<a href="#">N/A.</a>
<a href="#">NOAA Sources</a>	<a href="#">N/A.</a>
<a href="#">USACE Sources</a>	<a href="#">N/A.</a>
<a href="#">State/Local/Tribal Sources</a>	<a href="#">N/A.</a>
<a href="#">FEMA/FIRM maps</a>	<a href="#">FEMA FIRM Number 48201C0210L</a>

**B. Typical year assessment(s):** In an effort to determine adjacency and flow regimes (as it pertains to hydrologic trends and the subject aquatic resources verified by SWG), an analysis was done using the APT tool, elevation data, aerial imagery & other relevant site-specific information. The APT is a tool that affords the user the capability to look at rainfall at a specific location in the recent past compared to long term precipitation. It provides results for short term precipitation (last 72 hours), the last 3 months (WETS score) and the APT result comparing the last 30 years from numerous nearby gages. It also reports the PDSI (drought index) rainfall & WebWimp water balance/hydrologic seasons information. WETS analysis produces a score between 6 and 18 noting a score of 6-9 is drier than normal, 10-14 is normal & 15-18 is



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wetter than normal. The APT uses climatic data collected from numerous nearby weather stations and produces the most reliable source for a full 30 years of precipitation data). Here are the long term and short term response for the APT test for aeriels & site visit.

Date	Rain prior 72 hours	WETS (3 mth) score:	APT	Season	PDSI
20 NOV 2019 (Agent Site Visit)	<1"	12 (N)	Normal	Wet	Normal
16 NOV 2020 (Google Earth)	0	11 (N)	Normal	Wet	Incipient Drought
11 FEB 2019 (Google Earth)	<1	10 (N)	Normal	Wet	Moderate wetness
02 SEP 2017 (Google Earth)	~3	17(A)	Above	Dry	Extreme Wetness
30 AUG 2017	~8	17(A)	Above	Dry	Extreme Wetness

The results of the review of the APT analysis aiding in reaching the conclusion needed to determine if the subject feature have more than ephermal flow and/or are inundated by flooding from a (a)1 -(a)3 water in a typical year. Referenced resources score averaged 13.4 still within normal conditions.

Wetlands WA006, WA006b, WA006c, WA010, WA011, WA013, WA020 and WX001 are located in landscape position that would be anticipated to be flooded in a typical year by an (a)(2) Tributary to Willow Creek, another (a)(2). These features are considered jurisdictional under NWPR. These wetlands are in a contiguous landscape position that would be anticipated to be inundated by flooding by the nearest waters of the U.S. (Tributary to Willow Creek) in a typical year. The determination regarding potential inundation due to flooding by the nearest waterway is based largely upon site specific information and scientific studies regarding flood plain correlation and elevation information for bankfull 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.) as well as review of historic site information (including precipitation data) and aerial photos of the site . The study referenced previously revealed that the 10-year flood plain elevation is located in a slightly higher elevation than bank full elevation in riverine systems. Noting per NWPR regulation, that bank full is anticipated to be located within the area that folds in a typical year and as such jurisdictional. The aquatic resources listed here are located below bank full and the projected 10-year flood plain elevation for this area.

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