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): 5/4/2021
ORM Number: SWG-2020-00192
Associated JDs: N/A
Review Area Location[1]: State/Territory: Texas City: Houston County/Parish/Borough: Harris
Center Coordinates of Review Area: Latitude 30.067930 Longitude -95.578722

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.	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
WBA004 Willow Creek	150	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	WBA004 (Willow 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. Willow Creek (a)(2) flows into Spring Creek another (a)(2) which becomes an (a)(1) (identified on the Galveston District Navigable Waters List) water downstream of the confluence. Water is visible in the creek in every Google Earth aerial photo. 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.

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
WetA006	0.06	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	This wetland does not abut a a)1-a)3 water but it is located in landscape position that would be anticipated to be flooded in a typical year by 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.
WetA007	0.05	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	This wetland does not abut a a)1-a)3 water but it is located in landscape position that would be anticipated to be flooded in a typical year by 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.
WetA008	0.10	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	This wetland does not abut a a)1-a)3 water but it is located in landscape position that would be anticipated to be flooded in a typical year by 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

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
WetA001a	0.62	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.
WetA001	1.28	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

[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
				(a)(1) – (a)(3) water only by an artificial dike, barrier, or similar artificial structure.
WetA003	1.08	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.
WetA004	0.22	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.
WetA005	0.55	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.
WBA001	0.063	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).	WBA001 is a pond 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).
WBA002	0.003	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	WBA002 is a pond 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).

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
			impoundment of a jurisdictional water that meets (c)(6).	
WBA003	0.046	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).	WBA003 is a pond 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).
WBA005	121	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.
WBB001	1017	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.
WBB002	904	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.

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
WBB003	169	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.
WBB004	169	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.

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 Holderrieth Road Segment 3 Project, January 2019, updated maps 05/11/2021
This information is and is not sufficient for purposes of this AJD.
Rationale: required map and label changes received 05/11/21

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

☒ Photographs: Aerial and Other: Aerial-ESRI 2018, Site photos (7 and 8 Mar 2018, 11 Dec 2018)

☐ 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 (U.S. Department of Agriculture [USDA] 2018a

☐ USFWS NWI maps: Title(s) and/or date(s).

☒ USGS topographic maps: Tomball, Tx. 2019

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.

Data Source (select)	Name and/or date and other relevant information
Other Sources	N/A.

B. Typical year assessment(s): In an effort to determine adjacency (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 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). The site coridnates are located at an appx 140.30 ft elevation. Here are the long term and short term response for the APT test for aerials & site visit:

Date	Rain prior 72 hours	WETS (3 mth) score:	APT	Season	PDSI
08 MAR 2018 (Agent Site Visit)	0	14 (N)	Normal	Wet	Moderate wetness
01 JAN 2019 (Google Earth)	>2”	16 (W)	Wetter than normal	Wet	Severe wetness
28 OCT 2017 (Google Earth)	0	8 (D)	Drier than normal	Wet	Extreme wetness
30 Dec 2016 (Google Earth)	0	9 (D)	Drier than normal	Wet	Mild wetne ss

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. Average WETS score for the resources analyzed is normal, 11.75.

WBA004-Willow 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. Willow Creek (a)(2) flows into Spring Creek another (a)(2) which becomes an (a)(1) (identified on the Galveston District Navigable Waters List) water downstream of the confluence.

Wetlands A006 (0.06 ac), A007 (0.05 ac) and A008 (0.10 ac), are (a)(4) wetlands that are inundated by flooding from an (a)(1)-(a)(3) water in a typical year. They are situated in a landscape position that would be anticipated to be flooded in a typical year by Willow Creek an (a)(2) water.

Wetlands A001a (0.62 ac), A001 (1.28 ac), A003 (1.08 ac), A004 (0.22 ac) and A005 (0.55 ac) are non-jurisdictional waters (b)(1) waters. These aquatic features do NOT abut an a)1-a)3 water, NOR would they be inundated by flooding of an a)1-a)3 water in a typical year, NOR are they physically separated from an a)1-a)3 water by a single natural barrier, NOR are they physically separated by an artificial barrier that allows direct surface hydrologic connection between the aquatic feature(s) in review and an a)1-a)3 water in a typical year. Therefore, based on the APT tool analysis of historic aerial imagery and site visit dates there is no data to support the conclusion that these the aquatic features in review are inundated by overbank flooding from an (a)(1) – (a)(3) water in a typical year.

Ponds WBA001 (0.063 ac), WBA002 (0.003 ac), and WBA003 (0.046 ac) (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). These resources are excluded under b(8) and therefore, non-jurisdictional.

Drainage Ditches WBB001 (1,017 LF), WBB002 (904 LF), WBB003 (169 LF), WBB004 (169 LF), and WBA005 (121 LF) are excluded features as under (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).

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