**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): 3/25/2021
ORM Number: SWG-2020-00177
Associated JDs: N/A
Review Area Location[1]: State/Territory: Texas City: Highlands County/Parish/Borough: Harris
Center Coordinates of Review Area: Latitude 29.841958 Longitude -95.032542

## 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 |
| IS-1 (G103-03-00) | 0.41 | acre(s) | (a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature IS-1 (G103-03-00) is a naturally occurring surface water channel that contributes surface water flow to an (a) (1) water, San Jacinto River, in a typical year, is intermittent, and flows as such in a typical year. Based on visual observation, historic topographic maps and aerial imagery, this intermittent tributary meets the 33 CFR 328.3(a)(2) definition. |

[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 |
| OW-1 | 0.21 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature OW-1 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area. OW-1 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |
| OW-2 | 0.01 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature OW-2 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area. OW-2 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |
| OW-3 | 0.13 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature OW-3 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area. OW-3 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |
| OW-4 | 0.13 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature OW-4 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area. OW-4 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |
| OW-5 | 0.03 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature OW-5 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area. OW-5 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |
| OW-6 | 0.29 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional | Feature OW-6 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an |

| 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 |
| | | | water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | (a)(1) navigable water downstream of the study area. OW-6 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |
| OW-7 | 0.13 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature OW-7 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area. OW- 7 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |
| OW-8 | 0.02 | acre(s) | (a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Feature OW-8 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area. OW-8 contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. |

| Adjacent wetlands ((a)(4) waters): | | | | |
|---|---|---|---|---|
| (a)(4) Name | (a)(4) Size | | (a)(4) Criteria | Rationale for (a)(4) Determination |
| EW-1 | 1.96 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | EW-1 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, EW-1 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| EW-2 | 1.65 | N/A. | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | EW-2 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, EW-2 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| EW-3 | 1.45 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | EW-3 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study |

| Adjacent wetlands ((a)(4) waters): | | | | |
|---|---|---|---|---|
| (a)(4) Name | (a)(4) Size | | (a)(4) Criteria | Rationale for (a)(4) Determination |
| | | | | area; therefore, EW-3 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| EW-4 | 5.11 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | EW-4 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, EW-4 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| EW-5 | 1.04 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | EW-5 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, EW-5 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| EW-6 | 2.28 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | EW-6 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, EW-6 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands |
| FW-1 | 2.02 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | FW-1 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, FW-1 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| FW-2 | 0.04 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | FW-2 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, FW-2 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| FW-3 | 0.06 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | FW-3 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study |

| Adjacent wetlands ((a)(4) waters): | | | | |
|---|---|---|---|---|
| (a)(4) Name | (a)(4) Size | | (a)(4) Criteria | Rationale for (a)(4) Determination |
| | | | | area; therefore, FW-3 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| FW-4 | 0.03 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | FW-4 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, FW-4 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| FW-5 | 0.03 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | FW-5 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, FW-5 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| FW-6 | 2.74 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | FW-6 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, FW-6 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |
| FW-7 | 0.06 | acre(s) | (a)(4) Wetland abuts an (a)(1)-(a)(3) water. | FW-7 is located within the footprint of Highlands Reservoir, an impoundment of Goose Creek (O100-00-00). Goose Creek is considered an (a)(1) navigable water downstream of the study area; therefore, FW-7 abuts and shares an uninterrupted surface water connection to a (a)(1) navigable water. This wetland meets the 33 CFR 328.3(c)(i) definition of adjacent wetlands. |

## D. Excluded Waters or Features

| Excluded waters ((b)(1) – (b)(12)):[4] | | | | |
|---|---|---|---|---|
| Exclusion Name | Exclusion Size | | Exclusion[5] | Rationale for Exclusion Determination |
| ES-1 | 0.01 | acre(s) | (b)(3) Ephemeral feature, including an ephemeral | This feature is a shallow ephemeral swale that is only subject to water flow in direct response to precipitation. Based on visual observation, |

[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a request or 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 |
| | | | stream, swale, gully, rill, or pool. | historic topographic maps and aerial imagery, this ephemeral feature meets the (b)(3) exclusion definition. This feature does not meet the definition of an (a)(1) or (a)(2) water and is not located within an (a)(4) water. This feature does not relocate a tributary nor is it within a tributary. |
| ES-2 | 0.01 | acre(s) | (b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool. | This feature is a shallow ephemeral swale that is only subject to water flow in direct response to precipitation. Feature ES-2 flows through a culvert located approximately two feet above the OHWM of G103-03-00. Based on visual observation, historic topographic maps and aerial imagery, this ephemeral feature meets the (b)(3) exclusion definition. This feature does not meet the definition of an (a)(1) or (a)(2) water and is not located within an (a)(4) water. This feature does not relocate a tributary nor is it within a tributary. |
| DT-1 (O200-00-00) | 7.61 | acre(s) | (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). | Feature DT-1 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. DT-1 functions as a man-made roadside drainage ditch constructed in and draining only uplands and is not inundated by a water of the U.S. in a typical year. |
| DT-2 (O119-00-00) | 6.0 | acre(s) | (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). | Feature DT-2 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. DT-2 functions as a man-made roadside drainage ditch constructed in and draining only uplands and is not inundated by a water of the U.S. in a typical year. |
| PS-1 | 0.24 | acre(s) | (b)(1) Water or water feature that is not identified in (a)(1)-(a)(4) and does not meet the other (b)(1) subcategories. | Feature PS-1 is a constructed or excavated channel used to convey water. PS-1 does not meet the definition of an (a)(1) or (a)(2) water and was not constructed in an (a)(4) water. PS-1 does not relocate a tributary nor is it constructed in a tributary. PS-1 functions as a water supply canal constructed in uplands and is not inundated by a water 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: Waters of the U.S. Delineation Report; February 2020, Revised July and November 13, 2020, Halff and Associates, "O119-00-00-P001 Advanced Feasibility Study".

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: Select. Field photographs (Sept 30, 2019) and HCFCD Aerial Imagery for 1953, 1964, 1972, 1981, 1995, 2002, 2010, and 2018

☒ Corps site visit(s) conducted on: July 10, 2020

☒ Previous Jurisdictional Determinations (AJDs or PJDs): SWG-2016-01030; February 13, 2017

☒ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

☒ USDA NRCS Soil Survey: USDA Web Soil Survey NRCS SSURGO

☒ USFWS NWI maps: USFWS NWI Wetland Mapper

☒ USGS topographic maps: 1916, 1920, 1944, 1955, 1995, and 2019 Burnett Bay and Highlands, Texas USGS maps.

**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 | SJRA Highland Canal System Map |

**B. Typical year assessment(s):** Water features where analyzed using APT calculating for various references and dates. 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 and climatoligcal review for the past 30 years. The WETs score (last 3 mths) for the 10 JUL 2002 totaled 12 (Normal) on a scale of 6-18. 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. Based on randomly selected resources the APT was calculated for 6 selected resources and an determination of "normal," is made based on the condition value sums (avg 11). 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 precipation data. The site coridnates are located at an appx 43.25 ft elevation. Below is the result of numerous dates run for this site.

| Date | Rain prior 72 hours | WETS (3 mth) score: | APT | Season | PDSI |
|---|---|---|---|---|---|
| 20 DEC 2016 Google Earth | ~0" | 14 (N) | Nornal | Wet | Mild wetness |
| 28 OCT 2017 Google Earth | 0 | 14 (N) | Normal | Wet | Mild wetn ess |

| | | | | | |
|---|---|---|---|---|---|
| 01 JAN 2018 Google Earth | 0 | 10 (N) | Normal | Wet | Moderate wetness |
| 16 NOV 2020 Google Earth | <1 | 11 (N) | Normal | Dry | Mild drought |
| 30 SEP 2019 Agent site photos | <1 | 16(W) | Wetter than Normal | Wet | Severe Wetness |
| 10 JUL 2020 COE site visit | <1 | 12(N) | Normal | Dry | Incipient d rought |

Climatic data was collected from 7 weather stations all within (5.58-18.48 mi), is within the appropriate geographic region and is the most reliable source with a full 30 years of data. Furthermore, the precipitation assessment did not deviated from the 30th to 70th percentile of precipitation to tals for the periodic range used. For each period, the 30-day precipitation total falls within the 70th and 30th percentiles for totals from the same date range over the preceding 30 years.

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.

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