

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: SWG-2021-00775, HCFC, Clear Creek Regional Mitigation Bank (A700-01-00-Y001)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Texas County/parish/borough: Brazoria County City: Alvin
Center coordinates of site (lat/long in degree decimal format): Lat. 29.483778° **N**, Long. -95.274775° **W**.
Universal Transverse Mercator: UTM Easting 279446.53, UTM Northing 3263741.60, UTM Zone 15R
Name of nearest waterbody: Clear Lake
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Clear Creek (Brazoria Drainage District Ditch ID: A-100-00-00)
Name of watershed or Hydrologic Unit Code (HUC): HUC 12: 120402040200 (Clear Creek-Frontal Galveston Bay)
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- ☒ Office (Desk) Determination. Date: April 1, 2021
☒ Field Determination. Date(s): April 13, 2022

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- ☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- ☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☒ Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
☐ Non-RPWs that flow directly or indirectly into TNWs
☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☐ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 7,033 linear feet: approximately 20 width (ft) and/or acres.
Wetlands: 171.33 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

- ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Non-Regulated Waters

Under the Final Rule for Regulatory Programs of the Corps of Engineers published in the Federal Register (Fed. Reg.) on November 13, 1986, referred to as the 1986 Preamble, the USACE states they, "...generally do not consider the following waters to be Waters of the United States... (a) Non-tidal drainage and irrigation ditches excavated on dry land...(c) Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing" (51 Fed. Reg. 219 [41217], November 13, 1986). Streams S-1 and S-2, with a combined total of 2,381 LF, are not waters of the U.S. (Section 328.3(a) of 51 Fed. Reg. 219 [41217], November 13, 1986) because S-1 and S-2 are part of the same irrigation channel that appears to have been constructed wholly out of uplands. Wetlands W-4, W-5, W-7, W-8, W-9, W-13 and W-37, totaling 46.74 acres, are not waters of the U.S. (Section 328.3(c) of 51 Fed. Reg. 219 [41217], November 13, 1986) because W-4, W-5, W-7, W-8, W-9, W-13, and W-37 are artificial lakes that appears to have been constructed wholly in uplands and were historically used for rice growing. Currently, W-4, W-5, W-7, W-8, W-9, W-13, and W-37 exclusively serve as a stock watering areas...

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: N/A.

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: N/A.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 197 square miles

Drainage area: approximately 4 square miles

Average annual rainfall: approximately 55 inches

Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 2 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 5-10 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW⁵: General flow is ENE into Clear Creek (A100-00-00).

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: Chigger Creek (J-102-00-00) within the project area is classified as Strahler Stream Order 1.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: The course of Chigger Creek (Brazoria Drainage District ID J102-00-00) has remained constant within the tract since prior to 1939. However, evidence of maintenance activities on Chigger Creek within the tract is present in Google Earth aerial imagery in 2005 and 2006 and has occurred continuously since that time.

Tributary properties with respect to top of bank (estimate):

Average width: approximately 75 feet
Average depth: approximately 3-4 feet
Average side slopes: **3:1**.

Primary tributary substrate composition (check all that apply):

☒ Silts ☒ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☒ Vegetation. Type/% cover: Aquatic/5% total cover for total linear footage.
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable.
Presence of run/riffle/pool complexes. Explain: Minor pool complexes observed near culverts.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): 2 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: Chigger Creek (J102-00-00) accepts water runoff from surrounding areas and contributes to downstream flow during rainfall events.

Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: Bed and bank; scouring; and matted, bent or absent vegetation.

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):

☒ Bed and banks
☒ OHWM⁶ (check all indicators that apply):
☒ clear, natural line impressed on the bank ☒ the presence of litter and debris
☐ changes in the character of soil ☒ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☒ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☒ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges
☐ other (list):

(iii) **Chemical Characteristics:**

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Water color is generally clear with slight discoloration noticed in deeper pools.

Identify specific pollutants, if known: Minor roadside and household debris washes into Chigger Creek from the surrounding populated areas.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

☐ Riparian corridor. Characteristics (type, average width): .

☒ Wetland fringe. Characteristics: An emergent wetland fringe of approximately 8 feet wide exists the entire length of Chigger Creek on both banks within the tract..

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☒ Fish/spawn areas. Explain findings: Chigger Creek serves as fish spawning habitat for warm water fish species such as largemouth bass (*Micropterus salmoides*) and spotted gar (*Lepisosteus oculatus*).

☐ Other environmentally-sensitive species. Explain findings: .

☐ Aquatic/wildlife diversity. Explain findings: .

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 171.33 acres

Wetland type. Explain: PEM, PSS, and PFO1.

Wetland quality. Explain: Low quality PSS and PFO1 wetlands. PSS and PFO1 wetlands are dominated by Chinese tallow (*Triadica sebifera*).

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: There is an exchange of water between the wetlands that are located within the 100-year floodplain of Chigger Creek and Chigger Creek Bypass during flooding events.

Surface flow is: **Overland sheetflow**

Characteristics: Water is exchanged between Chigger Creek and the adjacent wetlands when flooding occurs.

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☒ Directly abutting

☒ Not directly abutting

☒ Discrete wetland hydrologic connection. Explain: Wetlands are located within the 100-year floodplain of Chigger Creek and only exchange water with Chigger Creek during flood events.

☐ Ecological connection. Explain: .

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **5-10** aerial (straight) miles from TNW.

Flow is from: **No Flow**.

Estimate approximate location of wetland as within the **50 - 100-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water observed in wetlands consisted of a clear brown color.

Identify specific pollutants, if known: Unknown.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

☐ Riparian buffer. Characteristics (type, average width): .

☒ Vegetation type/percent cover. Explain: FAC, FACW and OBL species were dominant on the tract.

☐ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☐ Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **30 (or more)**

Approximately (219.94) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
See Table 3.			

Summarize overall biological, chemical and physical functions being performed:

Chigger Creek is a Relatively Permanent Water and is classified as Strahler Stream Order 1 from its headwaters upstream of the site to a point downstream (i.e., the relevant reach). The downstream limit of the relevant reach is approximately 0.2 mile east-southeast of the intersection between Chigger Creek and Farm to Market Road 528. The upstream limit of the relevant reach of Chigger Creek is its headwaters, which is the intersection of Chigger Creek and Hal McLain Road. The relevant reach of Chigger Creek flows within a portion of Brazoria County that is a mixed use of open and developed land.

For this analysis, onsite resources are those features present within the review area for this AJD. Offsite resources are those features within the 100-year floodplain of the relevant reach, as defined above. Onsite there are 40 wetlands, totaling 171.33 acres, that are either adjacent to or abutting Chigger Creek. There are 42 offsite adjacent wetlands within the relevant reach 100-year floodplain. Based on USFWS NWI data, the offsite adjacent wetlands within relevant reach 100-year floodplain total 48.61 acres. Within this same review area, seven wetlands directly abut Chigger Creek. These wetlands are situated throughout the 100-year floodplain for the relevant reach of Chigger Creek. In total, including both onsite and offsite resources, there are a total of 82 wetlands, totaling 219.94 acres, that are either abutting or adjacent to the relevant reach of Chigger Creek.

There is a direct surface hydrologic connection between the relevant reach (Strahler Stream Order 1) and the nearest downstream TNW, Clear Creek, at the confluence of Chigger Creek and Clear Creek. Clear Creek ultimately flows into Clear Lake and Galveston Bay. These 219.94 acres of wetlands provide valuable temporary water storage during flooding events to help reduce the frequency and severity of flooding within the area and downstream to Clear Creek. The effects of removing or otherwise adversely affecting these wetlands would include increased flow volume and velocity to the downstream TNW (Clear Creek), which would likely result in increased flooding and scouring. As such, the aquatic resources within the relevant reach provide more than speculative or insubstantial effects to the physical integrity of the downstream TNW.

The 219.94 acres of adjacent and abutting wetlands provide beneficial filtration of chemical pollutants and bacteria from reaching Clear Creek downstream. Clear Creek is identified by the TCEQ as a 303(d) impaired water dioxin in edible tissue and PCBs in edible tissue; therefore, the wetlands within the relevant reach review area provide valuable filtration associated with the removal of these chemical pollutants. These wetlands also play an important role in maintaining the overall water quality of downstream RPWs and TNWs through water filtration; therefore, the aquatic resources within the relevant reach provide more than speculative or insubstantial effects that are inseparably bound to the physical and chemical integrity of the downstream TNW.

There are no federally listed species that require the aquatic resources of Chigger Creek or the adjacent wetland habitat to fulfill lifecycle requirements. However, species that are not federally listed, such as the largemouth bass (*Micropterus salmoides*), spotted gar (*Lepisosteus oculatus*), and roseate spoonbill (*Platalea ajaja*) were observed utilizing Chigger Creek and the adjacent wetlands within the site. While this habitat on the site is not unique within the relevant reach, it does provide suitable foraging and shelter habitat for these species and other aquatic and terrestrial life.

In summary, we have concluded that there is sufficient evidence that the 219.94 acres of adjacent and abutting wetlands within the relevant reach of Chigger Creek provide a significant nexus to the chemical, physical, and/or biological integrity of Clear Creek, a downstream TNW. It is our opinion that the relevant reach of Chigger Creek and the adjacent and abutting wetlands are waters of the United States and are subject to Section 404 of the Clean Water Act..

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:N/A.
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The relevant reach of Chigger Creek as defined in III.B.3 are part of an RPW that flows directly into Clear Creek, which is a TNW at the confluence of Chigger Creek and Clear Creek. There are approximately 219.94 acres of wetlands within the 100-year floodplain of the relevant reach of Chigger Creek. These wetlands provide chemical filtration, physical water storage, and biological habitat that are all important to Chigger Creek, an RPW, as well as downstream to Clear Creek, a TNW. Based on this information, we have determined that the relevant reach of Chigger Creek provides more than speculative or insubstantial effects on the chemical, physical, and biological integrity of the downstream TNW (Clear Creek)..
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: N/A.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
☐ TNWs: linear feet width (ft), Or, acres.
☐ Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
☒ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Water flow was observed during field visits on April 6 through April 21, 2021 and April 21, 2022. Water is also visible in Chigger Creek in all Google Earth Pro historic aerial imagery that was reviewed..
☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☒ Tributary waters: **7,033** linear feet **23** width (ft).
☐ Other non-wetland waters: acres.
 Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
 Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- ☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☒ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale

⁸See Footnote # 3.

indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Water flow was observed during field visits on April 6 through April 21, 2021 and April 21, 2022. Water is also visible in Chigger Creek in all Google Earth Pro historic aerial imagery that was reviewed. Wetland W-47 is an abutting wetland above the ordinary high water mark of Chigger Creek. Wetland W-48 is a fringe wetland that is below the ordinary high water mark of Chigger Creek. Wetlands W-47 and W-48, totaling 3.09 acres combined, are abutting to Chigger Creek, an RPW.**

- ☐ Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **3.09** acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- ☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **171.33** acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- ☐ Demonstrate that impoundment was created from “waters of the U.S.,” or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- ☐ Prior to the Jan 2001 Supreme Court decision in “*SWANCC*,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- ☐ Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- ☒ Other: (explain, if not covered above): **See Section II.B.2 for explanation.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- ☒ Non-wetland waters (i.e., rivers, streams): **2,381** linear feet **20** width (ft).
- ☒ Lakes/ponds: **46.74** acres.
- ☐ Other non-wetland waters: . acres. List type of aquatic resource: .
- ☐ Wetlands: . acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): . linear feet, . width (ft).
- ☐ Lakes/ponds: . acres.
- ☐ Other non-wetland waters: . acres. List type of aquatic resource: .
- ☐ Wetlands: . acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- ☐ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☒ Corps navigable waters’ study: 2010 list from Galveston District.
- ☒ U.S. Geological Survey Hydrologic Atlas: .
- ☒ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 Manvel, TX.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Brazoria County, Texas 2002.
- ☒ National wetlands inventory map(s). Cite name: .
- ☐ State/Local wetland inventory map(s): .
- ☒ FEMA/FIRM maps: panel 48039C0135K.
- ☐ 100-year Floodplain Elevation is: . (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Google Earth Pro and Nearmap 1944-2021.
or ☐ Other (Name & Date): .
- ☐ Previous determination(s). File no. and date of response letter: .
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: See attached tables.