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): 27 September 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Galveston District, SWG-2016-00241, Wetlands A through J - LyondellBasell Channelview Facility, 55-acre Tract, Sheldon Road, Channelview, Harris County, Texas

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Texas County/Parish: Harris City: Channelview
Center coordinates of site (lat/long in degree decimal format, NAD-83): Lat. See Table 1. ° N, Long. ° W;
Universal Transverse Mercator: UTM: , See Table 1. N., E.,NAD:
Name of nearest water body: Wallisville Gully
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A
Name of watershed or Hydrologic Unit Code (HUC): Buffalo-San Jacinto -- 12040104
☒ 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: 10 June 2016
☒ Field Determination. Date(s): 03 August 2016

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 no** "*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 waters[2] (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: linear feet: width (ft) and/or acres
   Wetlands: acres

   c. **Limits (boundaries) of jurisdiction** based on: **Not Applicable.**
   Elevation of established OHWM (if known):

[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).

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: The subject site is bordered on the north and east sides by pipeline rights-of-way, on the west by an industrial facility, and on the south by Wallisville Road. There are ten (10) wetlands located at the subject site, totalling approximately 9.0 acres (Wetland A - approximately 0.5 acre, Wetland B - approximately 0.8 acre, Wetland C - approximately 0.2 acre, Wetland D - approximately 0.3 acre, Wetland E - approximately 1.9 acres, Wetland F - approximately 0.1 acre, Wetland G - approximately 3.0 acres, Wetland H - approximately 0.2 acre, Wetland I - approximately 0.6 acre, and Wetland J - approximately 1.4 acres). The nearest waterbody, Wallisville Gully, is located approximately 1) 900 feet northwest of Wetland A, 2) 600 feet northwest of Wetland B, 3) 1,000 northwest of Wetland C, 4) 1,100 feet north-northwest of Wetland D, 5) 940 feet north of Wetland E, 6) 1,430 feet northeast of Wetland F, 7) 915 feet northeast of Wetland G, 8) 590 feet northeast of Wetland H, 9) 510 feet north-northeast of Wetland I, and 10) 420 feet north of Wetland J. Wallisville Gully is a partially modified and maintained drainage feature, of which the northernmost portion is heavily incised with high, steep banks. Wallisville Gully, which becomes a relatively permanent water approximately 1,200 feet north of Wetland A, flows approximately 3,000 feet, from its closest point to the subject site, to the northeast where it joins the San Jacinto River, a traditional navigable water (TNW).

Based on a review of multiple exhibits including but not limited to topographical maps, historical aerials, the U.S. Fish and Wildlife Service National Wetland Inventory map, the U.S. Department of Agriculture soil survey map data, and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), and a 03 August 2016 site visit, there appear to be no discrete surface hydrological connections between the subject wetland and any water of the U.S. The exact boundaries (as standard with isolated wetlands) were not verified, but the feature polygons were examined via aerial photography and in the field to ensure that they are enclosed polygons surrounded by uplands.

The subject wetlands are all located outside the 1% annual flood risk zone (100-year floodplain) of any water of the U.S.

- The subject wetlands are neither currently used, nor have been used in the past, nor susceptible to use for interstate or foreign commerce
- The subject wetlands are not subject to the ebb and flow of the daily tide.
- The subject wetlands do not cross interstate or tribal boundaries.
- There are no indications that these "Isolated*" wetlands would 1) affect or be used by any interstate or foreign travelers for recreational or other purposes, 2) affect or be used for fish or shellfish that could be taken and sold in interstate or foreign commerce, or 3) be involved in any direct current use or potential use for industrial purposes by industries in interstate commerce.
- The subject wetlands are not impoundments of any water of the U.S.
- The subject wetlands are not part of a surface tributary system to any water body.
- The subject wetlands are not part of the territorial seas.
- The subject wetlands are not located “Adjacent**” to waters of the U.S. (other than waters that are themselves wetlands).
- The subject wetlands are not located reasonably close to a waters of the US as to infer they are "ecologically adjacent"; for a water/wetland to be determined to "reasonably close" it must be in a geomorphic position such that an ecologic interconnectivity is beyond speculation or insubstantial for a known biologic species that requires both, the subject waters/wetlands and the nearest known waterbody (a known water of the U.S. other than an adjacent wetland) to fullfill spawning and/or life cycle requirements. There are no known species in this geo-region that requires both these waters/wetlands under review and the nearest known waterway to fulfill their life cycle requirements, therefore these waters/wetlands are ecologically isolated.

* 33 CFR 330.2 (e): Isolated waters means those non-tidal waters of the U.S. that are:
(1) Not part of a surface tributary system to interstate or navigable waters of the US; and
(2) Not adjacent to such tributary waterbodies.

** 33 CFR 328.3 (a)(7) adjacent wetlands: Federal regulations, specifically 33 CFR 328.3 c) defines “ADJACENT” as: bordering, contiguous or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes and the like are “adjacent wetlands.”

In summary, the subject wetlands have been identifed per the Atlantic and Gulf Coastal Plain Region Supplement of the 1987 Corps of Engineers Wetland Delineation Manual. The subject wetlands are not inseparably bound to a water of the U.S., are not located within the 1% flood risk zone (100-year floodplain of any water of the U.S.), and do not have a discrete hydrological surface connection to any water of the U.S. Therefore, the site wetlands are "isolated" with no known nexus to interstate commerce and as such would not be subject to federal jurisdiction under Section 404 of the Clean Water Act.

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.

[3] Supporting documentation is presented in Section III.F.

1. **TNW**

Identify TNW:

Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent":

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, fill out Section III.D.2 and 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 water body[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the water body 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: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

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

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain:
☐ Manipulated (man-altered). Explain:

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

[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.

Average depth: feet
Average side slopes: **Pick List**

Primary tributary substrate composition (check all that apply):

- ☐ Silts
- ☐ Sands
- ☐ Concrete
- ☐ Cobbles
- ☐ Gravel
- ☐ Muck
- ☐ Bedrock
- ☐ Vegetation. Type/% cover:
- ☐ Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime:
Other information on duration and volume:
Surface flow is: **Pick List.** Characteristics:
Subsurface flow: **Pick List**. Explain findings:

- ☐ Dye (or other) test performed:

Tributary has (check all that apply):

- ☐ Bed and banks
- ☐ OHWM[6] (check all indicators that apply):
  - ☐ clear, natural line impressed on the bank
  - ☐ changes in the character of soil
  - ☐ shelving
  - ☐ vegetation matted down, bent, or absent
  - ☐ leaf litter disturbed or washed away
  - ☐ sediment deposition
  - ☐ water staining
  - ☐ other (list):
  - ☐ the presence of litter and debris
  - ☐ destruction of terrestrial vegetation
  - ☐ the presence of wrack line
  - ☐ sediment sorting
  - ☐ scour
  - ☐ multiple observed or predicted flow events
  - ☐ abrupt change in plant community
- ☐ 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:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☐ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain:
Identify specific pollutants, if known:

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

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

[6]A 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 water body'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.
[7]Ibid.

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: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is**: Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** 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:

Identify specific pollutants, if known:

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

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

☐ Vegetation type/percent cover. Explain:

☐ 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: **Pick List**

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

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

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:

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:

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:

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:
   ☐ 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: linear feet width (ft)
   ☐ Other non-wetland waters: acres

   Identify type(s) of waters:

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   ☐ Water body 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.

[8]See Footnote # 3.

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 indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting 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: 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 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

[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.*

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.

☒ 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):

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): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☒ Wetlands: ~ 9.0 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: Wetland delineation submitted by the agent, Midwest Ecological, dated 01 December 2015

☒ 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: Data sheets from 03 August 2016 site visit

☐ Corps navigable waters' study:

☒ U.S. Geological Survey Hydrologic Atlas: Buffalo-San Jacinto -- 12040104
- ☐ USGS NHD data
- ☒ USGS 8 and 12 digit HUC maps

☐ Galveston District's Approved List of Navigable Waters

☒ U.S. Geological Survey map(s). Cite scale & quad name: 1:24K - Highland, Texas. 1982

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: USDA Web Soil Survey, accessed 20 April 2016

☒ National wetlands inventory map(s). Cite name: Online USFWS NWI Mapper, accessed 20 April 2016

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps: Harris County, Texas and Incorporated Areas, Panel 48201C0730L (06/16/2007)

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Google Earth Pro Aerials (1995-2014)
or ☒ Other (Name & Date): Site visit photos from 03 August 2016

☐ 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: The subject site is bordered on the north and east sides by pipeline rights-of-way, on the west by an industrial facility, and on the south by Wallisville Road. There are ten (10) wetlands located at the subject site, totalling approximately 9.0 acres (Wetland A - approximately 0.5 acre, Wetland B - approximately 0.8 acre, Wetland C - approximately 0.2 acre, Wetland D - approximately 0.3 acre, Wetland E - approximately 1.9 acres, Wetland F - approximately 0.1 acre, Wetland G - approximately 3.0 acres, Wetland H - approximately 0.2 acre, Wetland I - approximately 0.6 acre, and Wetland J - approximately 1.4 acres). The nearest waterbody, Wallisville Gully, is located approximately 1) 900 feet northwest of Wetland A, 2) 600 feet northwest of Wetland B, 3) 1,000 northwest of Wetland C, 4) 1,100 feet north-northwest of Wetland D, 5) 940 feet north of Wetland E, 6) 1,430 feet northeast of Wetland F, 7) 915 feet northeast of Wetland G, 8) 590 feet northeast of Wetland H, 9) 510 feet north-northeast of Wetland I, and 10) 420 feet north of Wetland J. Wallisville Gully is a partially modified and maintained drainage feature, of which the northernmost portion is heavily incised with high, steep banks. Wallisville Gully, which becomes a relatively permanent water approximately 1,200 feet north of Wetland A, flows approximately 3,000 feet, from its closest point to the subject site, to the northeast where it joins the San Jacinto River, a traditional navigable water (TNW).

Based on a review of multiple exhibits including but not limited to topographical maps, historical aerials, the U.S. Fish and Wildlife Service National Wetland Inventory map, the U.S. Department of Agriculture soil survey map data, and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), and a 03 August 2016 site visit, there appear to be no discrete surface hydrological connections between the subject wetland and any water of the U.S. The exact boundaries (as standard with isolated wetlands) were not verified, but the feature polygons were examined via aerial photography, and in the field, to ensure that they are enclosed polygons surrounded by uplands.

The subject wetlands are all located outside the 1% annual flood risk zone (100-year floodplain) of any water of the U.S.

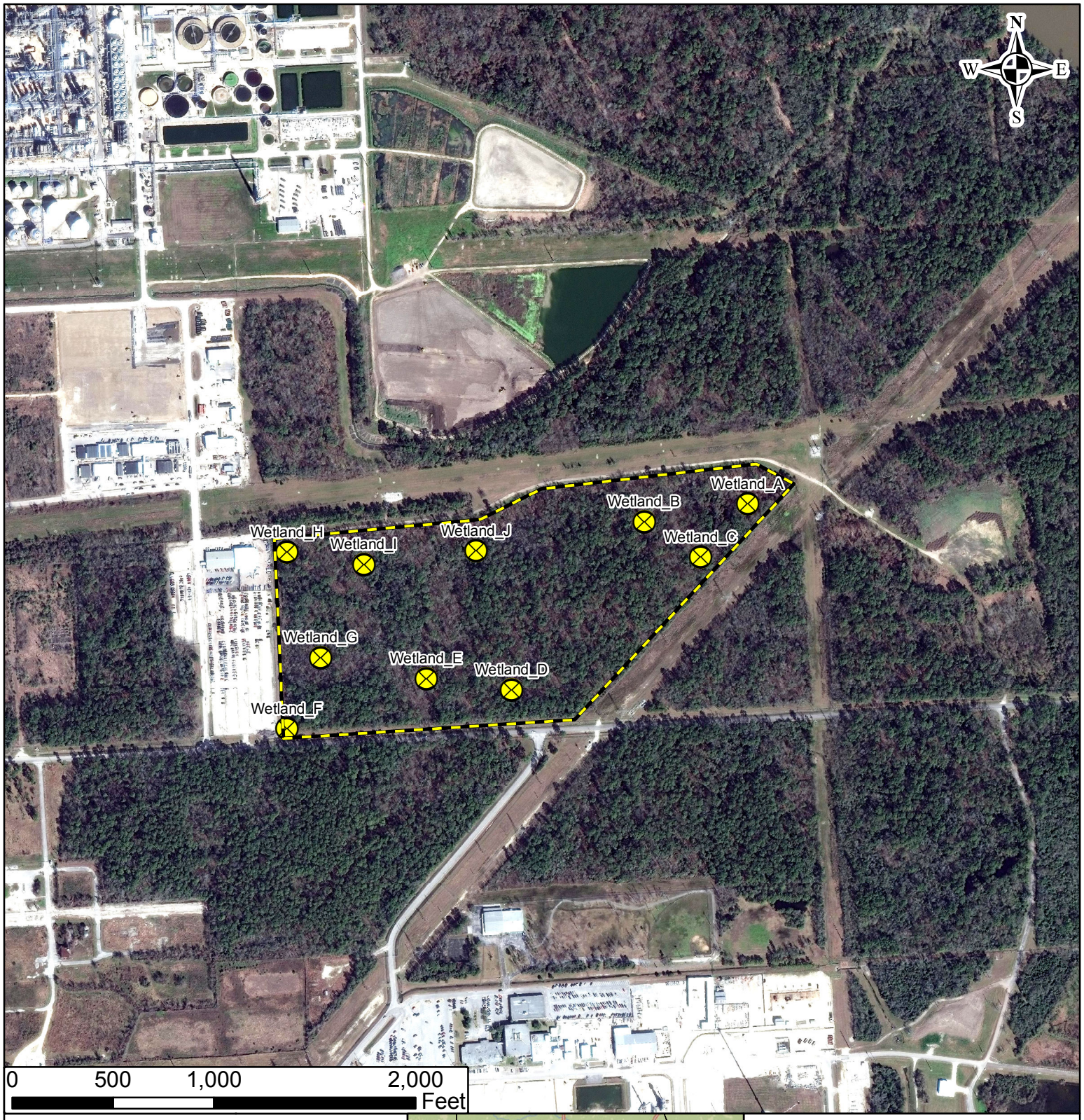
- The subject wetlands are neither currently used, nor have been used in the past, nor susceptible to use for interstate or foreign commerce
- The subject wetlands are not subject to the ebb and flow of the daily tide.
- The subject wetlands do not cross interstate or tribal boundaries.
- There are no indications that these "Isolated*" wetlands would 1) affect or be used by any interstate or foreign travelers for recreational or other purposes, 2) affect or be used for fish or shellfish that could be taken and sold in interstate or foreign commerce, or 3) be involved in any direct current use or potential use for industrial purposes by industries in interstate commerce.
- The subject wetlands are not impoundments of any water of the U.S.
- The subject wetlands are not part of a surface tributary system to any water body.
- The subject wetlands are not part of the territorial seas.
- The subject wetlands are not located “Adjacent**” to waters of the U.S. (other than waters that are themselves wetlands).
- The subject wetlands are not located reasonably close to a waters of the US as to infer they are "ecologically adjacent"; for a water/wetland to be determined to "reasonably close" it must be in a geomorphic position such that an ecologic interconnectivity is beyond speculation or insubstantial for a known biologic species that requires both, the subject waters/wetlands and the nearest known waterbody (a known water of the U.S. other than an adjacent wetland) to fullfill spawning and/or life cycle requirements. There are no known species in this geo-region that requires both these waters/wetlands under review and the nearest known waterway to fulfill their life cycle requirements, therefore these waters/wetlands are ecologically isolated.

* 33 CFR 330.2 (e): Isolated waters means those non-tidal waters of the U.S. that are:
(1) Not part of a surface tributary system to interstate or navigable waters of the US; and
(2) Not adjacent to such tributary waterbodies.

** 33 CFR 328.3 (a)(7) adjacent wetlands: Federal regulations, specifically 33 CFR 328.3 c) defines “ADJACENT” as: bordering, contiguous or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes and the like are “adjacent wetlands.”

In summary, the subject wetlands have been identifed per the Atlantic and Gulf Coastal Plain Region Supplement of the 1987 Corps of Engineers Wetland Delineation Manual. The subject wetlands are not inseparably bound to a water of the U.S., are not located within the 1% flood risk zone (100-year floodplain of any water of the U.S.), and do not have a discrete hydrological surface connection to any water of the U.S. Therefore, the site wetlands are "isolated" with no known nexus to interstate commerce and as such would not be subject to federal jurisdiction under Section 404 of the Clean Water Act.

Table 1.								
Site	Latitude	Longitude	UTM Zone	UTM Easting	UTM Northing	Approximate Size (acres)	Approximate Distance to Waterway (feet)	Approximate Distance to TNW (feet)
Wetland A	29.827374	-95.10138	15N	296953.7	3301509.8	0.5	900	2,590
Wetland B	29.827137	-95.102924	15N	296804	3301486.2	0.8	600	2,900
Wetland C	29.826652	-95.102118	15N	296881	3301431.1	0.2	1,000	3,000
Wetland D	29.824885	-95.105171	15N	296582.3	3301240.6	0.3	1,100	4,000
Wetland E	29.825108	-95.106473	15N	296456.9	3301267.6	1.9	940	4,150
Wetland F	29.824519	-95.108683	15N	296242.1	3301206.2	0.1	1,430	4,960
Wetland G	29.825493	-95.108056	15N	296304.7	3301313.1	3.0	915	4,400
Wetland H	29.826913	-95.108552	15N	296259.6	3301471.4	0.2	590	4,360
Wetland I	29.826715	-95.107383	15N	296372.2	3301447.3	0.6	510	4,000
Wetland J	29.82691	-95.105684	15N	296536.8	3301465.9	1.4	420	3,475

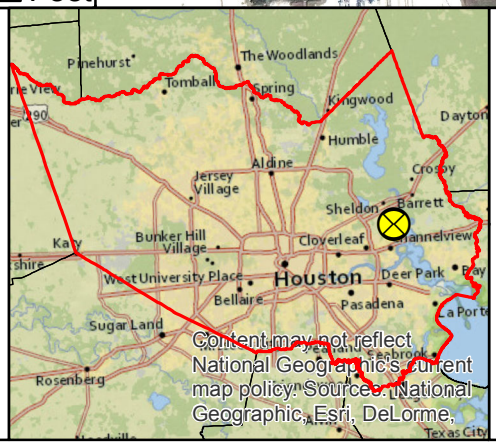


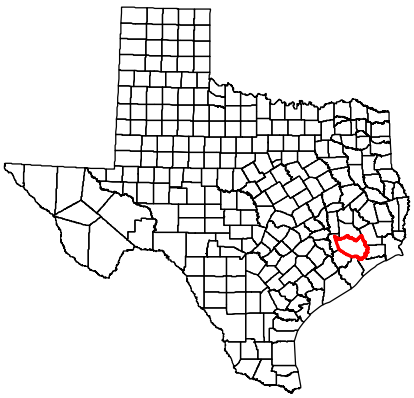
SWG-2016-00241
LyondellBasell
55-acre Tract
Jurisdictional Determination
Channelview, Harris Co, Texas

Review_Area

Wetlands

Base Map: DigitalGlobe Near Color
Imagery Date: 08 February 2016
Date: 28 June 2016





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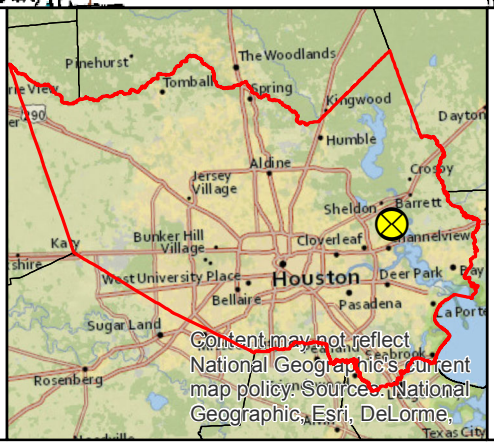

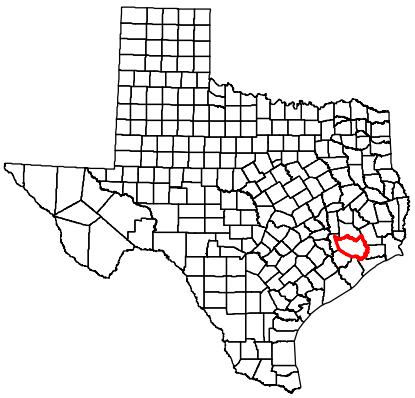

Base Map: 1:24K USGS Topo Quad
Map Title: Highlands, Texas
Date: 28 June 2016