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): 14 March 2019

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Galveston District, SWG-2018-00691, Duke Energy Renewables

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Texas County/Parish: Starr County City:

Center coordinates of site (lat/long in degree decimal format, NAD-83): Lat. See table in Section II B 2° N, Long. See table in Section II B 2° W;

Universal Transverse Mercator: UTM: See table in Section II B 2, N., E.,NAD:

Name of nearest water body: Los Olmos Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows:

Name of watershed or Hydrologic Unit Code (HUC): Los Olmos Watershed; 13090001

☒ 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: 14 March 2018

☐ Field Determination. Date(s):

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: **Pick List**
      Elevation of established OHWM (if known):

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

[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.

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **There are ten potential non-jurisdictional swale features, one of which includes a pond feature, in ten different review areas within the applicant's property.**

SWG-2018-00691, Mesteno Property, Review Area (RA) Data Table

RA Name	Latitude	Longitude	Zone	Easting	Northing	Acres
1	26.518298	-98.720976	14N	527800.46	2933114.36	5.0
2	26.521109	-98.740563	14N	525848.28	2933421.59	3.7
3	26.548322	-98.749191	14N	524982.76	2936433.79	6.2
4	26.542350	-98.741435	14N	525756.66	2935773.91	2.5
5	26.561035	-98.728718	14N	527019.08	2937845.94	1.6
6	26.498774	-98.720221	14N	527880.40	2930952.19	7.4
7	26.523081	-98.752346	14N	524673.89	2933637.67	6.3
8	26.522466	-98.748801	14N	525027.21	2933570.24	5.1
9	26.501447	-98.782673	14N	521656.00	2931236.00	12.2
10	26.506127	-98.760483	14N	525859.00	2931762.00	38.9

Review Area 1 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. There were no stream features observed by the agent, Energy Renewal Partners (ERP), in the field such as an ordinary high water mark (OHWM) or bed and bank features within the review area. Only a small break in slope was observed. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event. The monthly average annual rainfall in February from 1981 to 2010 is 1.26 inches collected from US Climate Data at the weather station in Rio Grande City. The review area is likely a headwater/swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 3%, resulting in this area being flat. The nearest year-round flowing stream is Olmitos Creek located 2.2 river miles downslope. This headwater/swale has no adjacent wetlands, has upland vegetation (honey mesquite (Prosopis glandulosa) and Bermuda grass (Cynodon dactylon)), and would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Also, the web soil survey classifies the soil within Review Area 1 as Ramadero Loam a well-drained, non-hydric soil. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 2 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. During ERP's site visit, ERP observed no OHWM and only a small break in slope and discontinuous, minor indications of a bed. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event causing the slight break in slope. The review area is likely a headwater/swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 3%, resulting in this area being flat. The nearest year-round flowing stream is Los Olmos Creek located 10.9 river miles downslope. Review Area 2 contains upland vegetation (honey mesquite and buffalograss (Bouteloua dactyloides)) and has no adjacent wetlands. This headwater/swale would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Also, the web soil survey classifies the soil within Review Area 2 as McAllen Fine Sandy Loam a well-drained, non-hydric soil. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 3 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. During ERP's site visit, ERP did not observe any indications of OHWM or bed and bank features. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has year-round flow or continuous flow at least "seasonally." This area would most likely carry overland sheet flow during a rain event. This review area is likely a swale where overland sheet flow begins to accumulate, but

lacks sufficient flow to exhibit features of a stream. This swale would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. Review area 3 contains upland vegetation (e.g. honey mesquite and buffalgrass) and has no adjacent wetlands. The gradient of the review area is less than 0.05%, resulting in this area being flat. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic maps depicts the wash as a second order drainage which flow northwest and terminates within the review area. There is not a nearest year-round flowing stream due to there being no desktop-identified connection depicted within the USGS topographic maps. The NHD does not exhibit a linear drainage feature in the review area. Also, the web soil survey classifies the soil within Review Area 3 as Ramadero Loam a well-drained, non-hydric soil. The section of pond within the Review Area 3 will not be impacted as a result of this project. However, based on the evidence collected in the field by ERP and the JD report, we determined that the pond feature has a berm and no outlet. Also, the pond receives its hydrology from rainfall and lacks hydrophytic vegetation. The preamble for 33 CFR 328, states "For clarification, it should be noted that we generally do not consider the following waters to be waters of the United States...(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." As such, the pond feature is an excluded water, not a water of the US and the swale feature is determined to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 4 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. During ERP's site visit, ERP observed a break in slope indicating a minor bank. However, the bank was not continuous and did not exhibit OHWM features. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event causing the slight break in slope. This swale would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. Review Area 4 contains upland vegetation (e.g. Bermuda grass and lotebush (Zizyphus obtusifolia)) and has no adjacent wetlands. The gradient of the review area is less than 3%, resulting in this area being flat. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic maps depicts the wash as a second order drainage that flows northwest and terminates within Review Area 4. There is not a nearest year-round flowing stream due to there being no desktop-identified connection depicted within the USGS topographic maps. The NHD does not exhibit a linear drainage feature in the review area. Also, the web soil survey classifies the soil within Review Area 4 as Ramadero Loam a well-drained, non-hydric soil. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 5 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. There were no stream features observed by ERP, in the field such as an OHWM or bed and bank features within the review area. Only a small break in slope was observed. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event. The review area is likely a headwater/swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 0.05%, resulting in this area being flat. This headwater/swale has no adjacent wetlands, has upland vegetation (honey mesquite, buffalograss, and Bermuda grass), and would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic map depicts the wash as a first order drainage which flows northwest 4.8 miles and then terminates before reaching a year-round flowing stream. The web soil survey classifies the soil within Review Area 5 as Ramadero Loam a well-drained, non-hydric soil. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 6 is located with the FEMA 100-year flood zone, but does not have a confined hydrological surface connection to any water of the United States. There were no stream features observed by ERP, in

the field such as an OHWM or bed and bank features within the review area. Only a small break in slope was observed. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event. The review area is likely a headwater/swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 0.05%, resulting in this area being flat. This headwater/swale has no adjacent wetlands (wetland determination form for DP3 can be found in file), has upland vegetation (honey mesquite, lotebush, and prickly pear), and would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. ERP observed approximately 500 feet north and south of the feature along the USGS topographic feature. Although ERP observed minor and discontinuous indications of a bed, there was no a continuous bed/bank or secondary indicators of an OHWM. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic map depicts the wash as a first order drainage that flows southeast 0.75 miles into Olmitos Creek. Olmitos Creek terminates at a pond feature depicted on topographic maps approximately 1.8 river miles from the review area. The web soil survey classifies the soil within Review Area 6 as Ramadero Loam, a well-drained, non-hydric soil. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 7 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. There were no stream features observed by ERP, in the field such as an OHWM or bed and bank features within the review area. Only a small break in slope was observed. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event. The review area is likely a headwater/swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 0.05%, resulting in this area being flat. The nearest year-round flowing stream is Los Olmos Creek located 10.6 river miles downslope. This headwater/swale has no adjacent wetlands, has upland vegetation (honey mesquite, buffalograss, and Bermuda grass), and would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic map depicts the wash as a first order drainage that flows south to Los Olmos Creek, the Los Olmos Creek flows into the Rio Grande River. The web soil survey classifies the soil within Review Area 7 as Ramadero Loam and McAllen Fine Sandy Loam both well drained, non-hydric soils. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 8 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. There were no stream features observed by ERP, in the field such as an OHWM or bed and bank features within the review area. Only a small break in slope was observed. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event. The review area is likely a headwater/swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 0.05%, resulting in this area being flat. This headwater/swale has no adjacent wetlands, has upland vegetation (honey mesquite, buffalograss, and Bermuda grass), and would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic map depicts the wash as a first order drainage which flows south 8.3 miles into Los Olmos Creek, and then flow into the Rio Grande River. The NHD does not show a riverine feature within the review area. The web soil survey classifies the soil within Review Area 8 as McAllen Fine Sandy Loam a well-drained, non-hydric soil. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

Review Area 9 is located outside of the FEMA 100-year flood zone and does not have a confined hydrological surface connection to any water of the United States. There were no stream features observed by ERP, in the field such as an OHWM or bed and bank features within the review area. Only a small break in slope was observed. Destruction of terrestrial vegetation, sediment sorting, scouring, or deposition were not found within the Review Area 9. Thus, there were no indications that this area has flow year-round or continuous flow at least "seasonally." This area would carry overland sheet flow during a rain event. The review area is likely a swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 5%, resulting in this area being flat. This swale has no adjacent wetlands, has upland vegetation (honey mesquite, buffalograss, and Bermuda grass), and would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. This is further supported by the USGS topographic maps depicting a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic map depicts the wash as a second order drainage that flows northwest and terminating 250 feet at a pond feature. The NHD does not show anything within the review area. The web soil survey classifies the soil within Review Area 9 as Ramadero loam a well-drained, non-hydric soil. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation under Section 404 of the Clean Water Act.

In Review Area 10 there were no stream features observed by ERP, in the field such as an OHWM or bed and bank features within the review area. Only a small break in slope was observed. There were no indications such as sediment sorting, scour, deposition of terrestrial vegetation or deposition that would indicate this area has flow year-round or continuous flow at least "seasonally." The review area does not have a confined hydrological surface connection to any water of the United States. This area would carry overland sheet flow during a rain event. The review area is likely a headwater/swale where overland sheet flow begins to accumulate, but lacks sufficient flow to exhibit features of a stream. The gradient of the review area is less than 3%, resulting in this area being flat. This is further supported by the review area being located within the FEMA 100-year flood zone and being depicted on the USGS topographic maps as a dashed blue line separated by three dots which symbolizes features such as a wash. Furthermore, the USGS topographic map depicts the wash as a second order drainage which flows south approximately 10.9 miles into Los Olmos Creek, which then flows into the Rio Grande River. The NHD exhibits a linear drainage feature within the review area. Also, the NWI database identifies palustrine emergent wetlands and a riverine feature within the review area. The web soil survey classifies the soil within Review Area 10 as Ramadero Loam a well-drained, non-hydric soil. ERP also conducted a wetland investigation within the review area. Two sample points were taken where the NWI indicated wetlands. The soil profile at both locations had a matrix color of 10 YR 4/1 from 0 to 16 inches with no redox features. Only one secondary hydrology indicator was observed, sparsely vegetated concave surface, that indicates wetland hydrology was not present at both sites. Both areas were dominated by frogfruit (Phyla nodiflora) a facultative plant species. Therefore, hydric vegetation was present at both sites. Soil and hydrology indicators were not found within the review area, thus wetlands were not present within the review area. The review area would not have a significant effect on the chemical, physical, and biological integrity of the lower elevation traditional navigable waters. As such, we determined the review area to be a non-jurisdictional water of the United States that is not subject to regulation 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.

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:

[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.

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

[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.

(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:

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.

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:

[8] See Footnote # 3.
[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.*

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.
☐ 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): **Based on a review of information submitted by ERP the features identified as "Review Area (AJD)" in Figure 1 of the applicant's plans are not waters of the U.S. and are not jurisdictional under Section 404 of the Clean Water Act as defined by 33 CFR Part 328.3 (a). See rationale in Section II.B.2.**

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: 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: Maps submitted by ERP on 22 August 2018
☒ 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:
☐ U.S. Geological Survey Hydrologic Atlas:
☐ 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: 1:24,000; La Gloria SW, TX; Las Islas Ranch, TX; Sagunda Ranch, Texas; El Suaz, Texas
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey
☒ National wetlands inventory map(s). Cite name: USFWS NWI Web Mapper
☐ State/Local wetland inventory map(s):
☒ FEMA/FIRM maps: 48427C0425C; 48427C0450C
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Google Earth Aerial Imagery dated Nov 2017
or ☒ Other (Name & Date): Photographs taken by ERP
☐ 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: There are 10 potential non-jurisdictional swale features and one pond feature in ten different review areas within the applicant's property. According to the Jurisdiction Determination Form Instructional Guidebook (Guidebook) on page 16, "swale or erosional features are characterized by low volume, infrequent, or short duration flow." There are no indications that these areas have flow year-round or continuous flow at least seasonally. The lack of OHWM and only slight breaks in slope within a flat landscape support that these areas would carry overland sheet flow during rain events. Furthermore, the review areas contain upland vegetation and no adjacent wetlands during the agent's site visit. The Guidebook also states on page 38, "Swales are generally shallow features in the landscape that may convey water across upland areas during and following storm events. Swales usually occur on nearly flat slopes and typically have grass or other low-lying vegetation throughout the swale." As such, the review areas are determined to be non-jurisdictional waters of the United States not subject to regulation under Section 404 of the Clean Water Act. The pond feature within Review Area 3 is determined to be an excluded water, thus not a water of the U.S and therfore not jurisdictional under Section 404 of the Clean Water Act.