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.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 14, 2022
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SWT-2022-229 (2 of 3)
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: TX
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: August 1, 2022 ☐ Field Determination. Date(s):
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew 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.
The	ere 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): 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

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: The review area contains two ephemeral unnamed tributaries (S-1, 2095 LF) (S-2, 667 LF), an adjacent wetland (W-2, 0.04), and six isolated wetlands (W-1, 0.17 AC) (W-3, 0.7 AC) (W-4, 0.15 AC) (W-5, 0.17 AC) (W-6, 0.53 AC) (W-7, 0.09 AC) which are entirely within the uplands.

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).

Supporting documentation is presented in Section III.F.

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.

2.	Wetland adjacent to TNW		
	Summarize rationale supporting determination:		
1.	Identify 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, 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

Drainage area: 60 acres Average annual rainfall: 48 inches Average annual snowfall: 1 inches (ii) Physical Characteristics: (a) Relationship with TNW: Tributary flows directly into TN

(i) General Area Conditions: Watershed size: 37,005 acres

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are Project wate

Identify flow route to TNW⁵: The unnamed streams (S-1 and S-2) flow into Panther Creek, which flows into Barkman Creek, then into McKinney Bayou, which flows into the Red River (TNW).

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: Both S-1 and S-2 are first order streams. (b) General Tributary Characteristics (check all that apply): Tributary is: Artificial (man-made). Explain: Manipulated (man-altered). Explain: **Tributary** properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 1 feet Average side slopes: 3:1. 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: Both S-1 and S-2 have stable banks. Presence of run/riffle/pool complexes. Explain: N/A. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1-2 % (c) Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Both S-1 and S-2 are ephemeral streams, based on limited drainage areas and not likely being influenced by groundwater, the streams have been determined to flow only in direct response to rain events (ephemeral)... Other information on duration and volume: N/A. Surface flow is: Confined. Characteristics: Both S-1 and S-2 have formed channels which confines flows. Subsurface flow: Unknown. Explain findings: N/A. Dye (or other) test performed: Tributary has (check all that apply): Bed and banks \square 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 \boxtimes sediment sorting leaf litter disturbed or washed away scour 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: No water is visible in the agents photos, the stream beds were dry during their site visit.

Identify specific pollutants, if known: There are no expected pollutants associated with these streams.

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.

. ,	Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Both S-1 and S-2 have associated riparian corridors that are a ecidous trees common to the area. Wetland fringe. Characteristics: S-1 has an associated forested wetland (W-2), however the majority of the buffer for
these stre	eams is an upland habitat.
these stre	Habitat for:
	Federally Listed species. Explain findings:
	Fish/spawn areas. Explain findings:
	Other environmentally-sensitive species. Explain findings:
	Aquatic/wildlife diversity. Explain findings:
2. Cha	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)	Physical Characteristics:
	(a) General Wetland Characteristics:
	Properties:
	Wetland size: 0.04 acres
	Wetland type. Explain: W-2 is a palustrine forested wetland.
	Wetland quality. Explain: W-2 is of such limited size that it is likely performing very few functions.
	Project wetlands cross or serve as state boundaries. Explain: No.
	(b) General Flow Relationship with Non-TNW:
.1 1	Flow is: Ephemeral flow . Explain: As an adjacent wetland, W-2 would likely exhibit an ephemeral flow regime. This
wetland i	may contribute surface water to stream S-1 during heavy rain events.
	Surface flow is: Overland sheetflow Characteristics: W-2 likley provides sheet flow to S-1.
	Subsurface flow: Unknown. Explain findings: N/A. Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW:
	☐ Directly abutting
	☑ Not directly abutting
	Discrete wetland hydrologic connection. Explain: W-2 is in close proximity to S-1, located within the overall
riparian b	ouffer for this stream, the wetland may provide sheet flow during flooding conditions.
	Ecological connection. Explain:
	Separated by berm/barrier. Explain:
	(1) P. 1. 1. (2.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
	(d) Proximity (Relationship) to TNW
	Project wetlands are 20-25 river miles from TNW.
	Project waters are 15-20 aerial (straight) miles from TNW.
	Flow is from: Pick List.
	Estimate approximate location of wetland as within the 500-year or greater floodplain.
(ii)	Chemical Characteristics:
(11)	Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
	characteristics; etc.). Explain: No water is visible in the agents photos for W-2, the wetland was dry during the site visit.
	Identify specific pollutants, if known: No pollutants are expected for this wetland.
	recently specific policians, it known. No policians are expected for any western.
(iii)	Biological Characteristics. Wetland supports (check all that apply):
()	Riparian buffer. Characteristics (type, average width): W-2 is associated with the riparian buffer for stream S-1.
	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: This wetland likely supports marcoorganisms and microorganisms
luring the wet	ttest periods of the year on a limited scale.
~	

Characteristics of all wetlands adjacent to the tributary (if any)
All wetland(s) being considered in the cumulative analysis: 1
Approximately (0.04) 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> W-2. N <u>Size (in acres)</u>

Summarize overall biological, chemical and physical functions being performed: The forested wetland W-2 likely provides limited water quality benefits due to nutrient cycling, filtration, and reducing flood water energy associated with S-1. The wetland supports water table recharge, as well as providing seasonal aquatic habitat for aquatic species.

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: Stream S-2 has been determined as an NRPW and is not depicted on the USGS Topographic Map.. Due to this stream being in a region of greater rain events per year, this stream may exhibit a higher frequency of flow events if it receives direct rain fall, this stream is not likely to be influenced by ground water based on its landscape setting within the uplands. This stream likely does not provide measureable benefits to Panther Creek; it is unlikely that these benefits equate to a more than speculative or insubstantial benefit to the Red River (TNW), which is over 25 river miles from this water. This stream has a very small drainage area of approximately 40 acres. This ephemeral stream may provide some reductions in peak flood flows going into Panther Creek; however, this is speculative in nature. This NRPW does not meet the SigNex standard set within the Rapanos Guidance document and is supported within the agent's delineation report as well as this form.
- 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: Stream S-1 has been determined as an NRPW and is not depicted on the USGS Topographic Map. The tributary has an associated wetland (W-2) which is adjacent to the tributary. W-2 wetlands is a forested wetland. This ephemeral stream has a bed/bank and is approximately 4 feet wide and 1 feet deep. This tributary forms within the review area and flows north eventually into Panther Creek. The wetland occurs along the riparian buffer of the stream. W-2 likely provides limited wildlife habitat during the spring rain season. This ephemeral stream along with its wetland may provide some reductions in peak flood flows going into downstream waters. This stream has a riparian corridor throughout the review area, thus would contribute organics/nutrients to downstream waters. The water quality is likely suitable for supporting aquatic organisms, due to the limited sources of pollutants which could influence this tributary and its downstream waters. This stream and wetland may likely provide limited benefits to Panther Creek; however, it is unlikely that these functions/benefits equate to a more than speculative or insubstantial benefit to the Red River (TNW), which is over 25 river miles from this water. This NRPW and wetland do not meet the SigNex standard set within the Rapanos Guidance document and is supported within the agent's delineation report as well as this form.

Section III.D: D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY): TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: linear feet TNWs: width (ft), Or, acres. Wetlands adjacent to TNWs: acres. 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: 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: Identify type(s) of waters: 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. 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. 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.

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

⁸See Footnote # 3.

	7. Impoundments of jurisdictional waters. 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. ☐ 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: (W-1, 0.17 AC) (W-3, 0.7 AC) (W-4, 0.15 AC) (W-5, 0.17 AC) (W-6, 0.53 AC) (W-7, 0.09 AC) 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.
SEC	CTION 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: AJD Report Dated April 20, 2022. 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:

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.

Corps navigable waters' study: .
U.S. Geological Survey Hydrologic Atlas: ORM data reviewed August 1, 2022.
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
U.S. Geological Survey map(s). Cite scale & quad name: Hooks, OK 1:24,000.
USDA Natural Resources Conservation Service Soil Survey. Citation: Soil data included in report.
National wetlands inventory map(s). Cite name: ORM data reviewed August 1, 2022.
State/Local wetland inventory map(s):
FEMA/FIRM maps: .
100-year Floodplain Elevation is: N/A (National Geodectic Vertical Datum of 1929)
Photographs: Aerial (Name & Date): Google Earth, Dated January 2022.
or ☑ Other (Name & Date): Site photos included in report.
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 review area is approximately 100 acres.