WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Lake Ralph Hall Supplemental JD City/County: Ladonia/Fannin Sampling Date: 5/31/2017

Applicant/Owner: Upper Trinity Regional Water District State: TX Sampling Point: WP 1471

Investigator(s): Jason Voight, Andrew Sample Section, Township, Range:

Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 0-1%

Subregion (LRR): Southwest Prairies Lat: 33.46202 deg Long: -95.91898 deg Datum: NAD83

Soil Map Unit Name: Tinn Clay, Occasionally Flooded NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil X, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

Depressional area associated with former channel scar; comparable area to WP 1410

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 700- sq ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus macrocarpa	25	Yes	FACU
2. Fraxinus pennsylvanica	25	Yes	FAC
3.			
4.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 700 sq ft)			
1. Ulmus crassifolia	2	No	FAC
2.			
3.			
4.			
5.			
	2	= Total Cover	
Herb Stratum (Plot size: 450 sq ft)			
1. Carex crus-corvi	10	Yes	OBL
2. Viola missouriensis	5	No	FACW
3. Lolium multiflorum	10	Yes	UPL
4. Ptilimnium nuttalli	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	30	= Total Cover	
Woody Vine Stratum (Plot size: 450)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 70

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	10	x 2 =	20
FAC species	27	x 3 =	81
FACU species	25	x 4 =	100
UPL species	10	x 5 =	50
Column Totals:	82 (A)		261 (B)

Prevalence Index = B/A = 3.18

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: WP 1471

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10 YR 3/1	95					Clay	
4-18			10 YR 4/6	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR F**)
- ☐ 1 cm Muck (A9) (**LRR F, G, H**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox Depressions (F8)
- ☐ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (**LRR I, J**)
- ☐ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ☐ Dark Surface (S7) (**LRR G**)
- ☐ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Redox features observed; Tinn clay, occasionally flooded is nationally listed hydric soil; naturally dark soil

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)
- ☐ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Depressional area associated with former channel scar

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Lake Ralph Hall Supplemental JD City/County: Ladonia/Fannin Sampling Date: 5/31/2017

Applicant/Owner: Upper Trinity Regional Water District State: TX Sampling Point: WP 1504

Investigator(s): Jason Voight, Andrew Sample Section, Township, Range:

Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 0-1%

Subregion (LRR): Southwest Prairies Lat: 33.45929 Long: -95.93517 Datum: NAD83

Soil Map Unit Name: Tinn Clay, Occasionally Flooded NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil X, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Wooded area bordering the north side of the North Sulphur river channel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 700 sq ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Ulmus crassifolia	40	Yes	FAC
2. Celtis laevigata	40	Yes	FAC
3. Fraxinus pennsylvanica	5	No	FAC
4. Maclura pomifera	5	No	FACU
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 700 sq ft)			
1. Ulmus crassifolia	10	No	FAC
2. Celtis laevigata	50	Yes	FAC
3. Fraxinus pennsylvanica	2	No	FAC
4.			
5.			
	62	= Total Cover	
Herb Stratum (Plot size: 450 sq ft)			
1. Elymus virginicus	50	Yes	FAC
2. Viola missouriensis	10	No	FACW
3. Carex planostachys	40	Yes	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 450 sq ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: WP 1504

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-18	10 YR 2/1	90					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR F**)
- ☐ 1 cm Muck (A9) (**LRR F, G, H**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (**LRR I, J**)
- ☐ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ☐ Dark Surface (S7) (**LRR G**)
- ☐ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** X

Remarks:

No redox features observed; Tinn clay, occasionally flooded is nationally listed hydric soil; naturally dark soil

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)
- ☐ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX D

PHOTOGRAPHS

PHOTOGRAPHS

ON-CHANNEL OPEN WATERS

OCP2. WP235 Pond with 3 foot wetland fringe. 5/30/2017.

OCP2. WP235 Pond with 3 foot wetland fringe. 5/30/2017.

OCP3. WP236 Pond with 3-15 foot wetland fringe. 5/30/2017.

OCP3. WP236 Pond with 3-15 foot wetland fringe. 5/30/2017.

OCP3. WP238 Larger part of the 3-15 foot wetland fringe of on-channel pond 3. 5/30/2017.

OCP4. WP240 Pond with no wetland fringe. 5/30/2017.

OCP4. WP240 Pond with no wetland fringe. 5/30/2017.

OCP5. WP401 Pond with 1 foot wetland fringe. 5/31/2017.

OCP5. WP401 Pond with 1 foot wetland fringe. 5/31/2017.

OCP7. WP320 Small pond with no wetland fringe before transition to channel. 5/30/2017.

OCP8. WP1472 Pond with partial 1 foot wetland fringe. 5/31/2017.

OCP8. WP1472 Pond with partial 1 foot wetland fringe. 5/31/2017.

OCP10. WP326 Pond with 6 foot wetland fringe and submerged vegetation. 5/30/2017.

OCP10. WP326 Pond with 6 foot wetland fringe and submerged vegetation. 5/30/2017.

OCP11. WP400 Pond with partial 1 foot wetland fringe, submerged and floating vegetation. 5/30/2017.

OCP11. WP400 Pond with partial 1 foot wetland fringe, submerged and floating vegetation. 5/30/2017.

OCP13. WP1 Pond with partial 1-6 foot wetland fringe. 6/1/2017.

OCP13. WP2 Pond with 1-6 foot partial wetland fringe. 6/1/2017.

OCP17. WP1500 Large pond with wetland fringe ranging from 1-20 feet and algae. 5/31/2017.

OCP17. WP1501 Large pond with wetland fringe ranging from 1-20 feet and algae. 5/31/2017.

OCP17. WP1502 Large pond with wetland fringe ranging from 1-20 feet and algae. 5/31/2017.

OCP17. WP1502 Large pond with wetland fringe ranging from 1-20 feet and algae. 5/31/2017.

OCP17. WP1503 Large pond with wetland fringe ranging from 1-20 feet and algae. 5/31/2017.

OCP19. WP715 Pond with partial 1-3 foot wetland fringe. 5/31/2017.

OCP19. WP715 Pond with partial 1-3 foot wetland fringe. 5/31/2017.

OCP23. WP336 Large pond with partial 1 foot wetland fringe. 6/1/2017.

OCP32. WP4 Pond with no wetland fringe. 5/31/2017.

OCP32. WP4 Pond with no wetland fringe. 5/31/2017.

OCP32. WP4 Pond with no wetland fringe. 5/31/2017.

OCP33. WP10 Pond with partial 3 foot wetland fringe and submerged vegetation. 5/31/2017.

OCP33. WP10 Pond with partial 3 foot wetland fringe and submerged vegetation. 5/31/2017.

PHOTOGRAPHS

UPLAND OPEN WATERS

UP6. WP226 Upland Pond. 5/30/2017.

UP7. WP228 Upland Pond. 5/30/2017.

UP7. WP228 Upland Pond. 5/30/2017.

UP8. WP227 Upland Pond. 5/30/2017.

UP8. WP227 Upland Pond. 5/30/2017.

UP16. WP234 Upland Pond. 5/30/2017.

UP17. WP231 Upland Pond. 5/30/2017.

UP18. WP233 Upland Pond. 5/30/2017.

UP19. WP225 Upland Pond. 5/30/2017.

UP30. WP322 Upland Pond. 5/30/2017.

UP65. WP402 Upland Pond. 5/31/2017.

UP65. WP402 Upland Pond. 5/31/2017.

UP67. WP1473 Upland Pond. 5/31/2017.

UP79. WP713 Upland Pond below UP207. 5/31/2017.

UP79/80. WP714 Berm between ponds below UP207. 5/31/2017.

UP80. WP714 Upland Pond. 5/31/2017.

UP117. WP334 Upland Pond. 6/1/2017.

UP117. WP335 Upland Pond. 6/1/2017.

UP143. WP4 Upland Pond. 6/2/2017.

UP143. WP4 Upland Pond. 6/2/2017.

UP152. WP711 Upland Pond. 5/31/2017.

UP155. WP711 Upland Pond. 5/31/2017.

UP168. WP6 Upland Pond. 5/31/2017.

UP207. WP713 Upland. 5/31/2017.

E-4: Approved Jurisdictional Determination

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

July 27, 2017

Regulatory Division

SUBJECT: SWF-2003-00336, Lake Ralph Hall, Upper Trinity Regional Water District

Mr. Larry Patterson
Upper Trinity Regional Water District
900 N. Kealy
P.O. Drawer 305
Lewisville, Texas 75067

Dear Mr. Patterson:

This letter is in regard to your request for an approved jurisdictional determination information received March 29, 2017, and additional information received June 22 and July 5, 2017, concerning the proposed Lake Ralph Hall Reservoir project located in Fannin County, Texas. The study area for the approved jurisdictional determination encompasses approximately 13,100 acres.

We have reviewed the site in question in accordance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. Under Section 404, the USACE regulates the discharge of dredged and fill material into waters of the United States, including wetlands. Our responsibility under Section 10 is to regulate any work in, or affecting, navigable waters of the United States.

Based on the Supplemental Report in Support for AJD for proposed Lake Ralph Hall project, dated June 21, 2017, multiple previous site visits associated with the ongoing development of the Environmental Impact Statement associated with the permit application, and other information available to us, waters of the United States under Section 404 do exist in the study area. We concur with the delineation of waters of the United States as shown on the 11 maps sheets included in the referenced report identified as Aquatic Resources Proposed Lake Ralph Hall Supplemental Jurisdictional Determination. This approved jurisdictional determination (JD) is valid for a period of no more than five (5) years from the date of this letter unless new information warrants revision of the delineation before the expiration date. A copy of the Approved Jurisdictional Determination form supporting this determination is enclosed for your information.

This determination does not convey any property rights, either in real estate or material or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or Federal, State, or local laws or regulations. This determination does not eliminate the requirements to obtain State or local permits or approvals as needed.

Department of the Army authorization would be required for the discharge of dredged or fill material into any areas identified as waters of the United States, unless otherwise exempted. If you anticipate a discharge, please provide us with a detailed description of the proposed project, a suitable map of the proposed project area showing the location of proposed discharges, the type and amount of material (temporary or permanent), if any, to be discharged, and plan and cross-section views of the proposed project. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

The Applicant may accept or appeal this approved JD or provide new information in accordance with the enclosed Notification of Administration Appeal Options and Process and Request for Appeal (NAAOP-RFA). If the Applicant elects to appeal this approved JD, the Applicant must complete Section II (Request for Appeal or Objections to an Initial Proffered Permit) of the enclosure and return it to the Division Engineer, ATTN: CESWD-PD-O Appeals Review Officer, U.S. Army Corps of Engineers, 1100 Commerce Street, Dallas, Suite 831, Texas 75242-0216 within 60 days of the date of this notice. Failure to notify the USACE within 60 days of the date of this notice means you accept the approved JD in its entirety and waive all rights to appeal the approved JD.

Thank you for your interest in our nation's water resources. If you have any questions concerning this matter please contact Mr. Chandler Peter at (817) 886-1736. Other information concern our regulatory program is at http://www.swf.usace.army.mil/Missions/Regulatory.

Please help the regulatory program improve its service by completing the survey on the following website: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Sincerely,

Stephen Brooks
Chief, Regulatory Division

Enclosures:

Appeals Form
Approved Jurisdictional Determination Form

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Upper Trinity Regional Water District	File Number: 2003-00336	Date: 7/24/2017
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact: Mr. Elliott Carman Administrative Appeals Review Officer (CESWD-PD-O) U.S. Army Corps of Engineers 1100 Commerce Street, Suite 831 Dallas , Texas 75242-1317 469-487-7061

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

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): 26 June 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Fort Worth District, Lake Ralph Hall, SWF-2003-00336

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Texas County/parish/borough: Fannin City: Ladonia
Center coordinates of site (lat/long in degree decimal format): Lat. 33.46302° **N**, Long. 95.90102° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: North Sulphur River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Sulphur River
Name of watershed or Hydrologic Unit Code (HUC): 8 - 11140301
☒ 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: June 26, 2017
☒ Field Determination. Date(s): Specific field investigation to develop data to produce PJD dated October 26, 2006 were conducted by applicant August-September, 2005. USACE and cooperating agencies conducted numerous site visits to portions of project area from 2002 through 2015 associated with jurisdictional determination and resource assessments associated with development of Environmental Impact Statement for proposed project.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent 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:**
      Stream (non-wetland) waters: linear feet: 690,918 acreage: 387.14 (streams)
      Other open waters: acres: 59.89 (on channel ponds)
      Wetlands: 10.0 acres (PEM lacustrine fringe around on-channel ponds).

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual and Great Plains Delineation Supplement**
      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: **212 open water stock tanks constructed in uplands occur within the study area totaling 83 acres (Table A-3 of Appendix A). Additionally, there are 3.8 acres (comprised of 26 features – Table A-4 of Appendix A) of forested wetlands associated with remnant channels of the North Sulphur River. Due to historic channelization and significant channel degradation, the 100 year flood of the North Sulphur River is contained in its existing channel banks. No hydrologic connection/significant nexus exists between the remnant channels and the North Sulphur River.**

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: No TNWs are in assessment area. The nearest USACE designated navigable water is the segment of the Sulphur River downstream of Wright Patman Dam to the Texas/Arkansas state border. See section B.1.ii below for distance.

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": N/A.

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

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

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

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

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

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

   (i) **General Area Conditions:**
   Watershed size: 100 square miles
   Drainage area: 467 square miles
   Average annual rainfall: 33 inches
   Average annual snowfall: 3 inches

   (ii) **Physical Characteristics:**
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☒ Ephemeral tributaries flow through 2 and the North Sulphur River flows through 1 tributary before entering TNW.

   Project waters are more than 100 river miles from TNW.

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

Project waters are more than 30 river miles from RPW.
Project waters are 105 aerial (straight) miles from TNW.
Project waters are 37 aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: Named (see item b below) and unnamed tributaries flow into North Sulphur River which flows into to Sulphur River (starting at confluence with South Sulphur River which becomes navigable approximately 105 miles downstream.
Tributary stream order, if known: Varies.

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural. Explain:
☐ Artificial (man-made). Explain:
☒ Manipulated (man-altered). Explain: North Sulphur River and named (Merrill, Bralley Pool, Leggets Branch, Davis, Pickle, Pot, Brushy, Bear, Allen, Long and Headrick Branch Creeks) and unnamed tributries to it are natural channels but modified due to headcuts. North Sulphur River channelized in 1930s. Unique soil properties continue to erode and channel as well as tributaries continue to degrade. Headcuts occur to all tributaries in the study area.

Tributary properties with respect to top of bank (estimate):
Average width: 150 feet
Average depth: 45 feet
Average side slopes: **2:1.**

Primary tributary substrate composition (check all that apply):

☒ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☒ Bedrock	☐ Vegetation. Type/% cover:	

☐ Other. Explain: Bedrock is decomposing soft shale.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: highly eroding, sloughing banks with channel eroded into underlying shale bedrock; delamination of the shale results in average channel down-cutting at a rate of 2 inches/year and channel widening of 4 inches/year as side slopes are destabilized and slough.

Presence of run/riffle/pool complexes. Explain: No riffle pool complexes exist.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): Dependent on tributary. North Sulphur River is 0.1 %

(c) Flow:
Tributary provides for: **Intermittent but not seasonal flow Other tributaries are epemeral.**
Estimate average number of flow events in review area/year: **6-10**
Describe flow regime: Channel flow is extremely flashy with high flows immediately following significant rain events rapidly reducing to a trickle unless subsequent rainfall experienced in the watershed. Channel is frequently dry in most locations with variable to non-existent pooling.
Other information on duration and volume: Stage discharge and rating curves are provided in the geomorphological evaluation and hydraulic and hydrologic analyses.

Surface flow is: **Discrete and confined.** Characteristics: Flashy – immediate peak with rapidly diminishing flows.

Subsurface flow: **Unknown**. Explain findings: No groundwater discharges documented in hydrologic analysis.
☐ 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

[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.
[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 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.

☐ 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: Turbid during flow events but clearer during lower flows

Identify specific pollutants, if known: Suspended solids.

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

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

☒ Wetland fringe. Characteristics: Emergent wetland occurs on fringes of on-channel stock tanks.

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☐ Other environmentally-sensitive species. Explain findings:

☒ Aquatic/wildlife diversity. Explain findings: Limited invertebrate and songbird utilization.

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties: PEM fringes associated with on channel ponds

Wetland size: 10 acres

Wetland type. Explain: Wetlands confined to on channel ponds

Wetland quality. Explain: Detailed functional assessment of the wetlands not accomplished. Vegetation in wetland areas are typically desirable and include Typha, Eleocharis, Polyuganum, Carex, Juncus, Sagittaria, Ludwigia, Potamigeton and Ranunculus species. Hydrilla was also documented in some assessed areas. Wetlands are expected to rate as low to average quality based on geomorphic and vegetation type, density as well as agricultural activities and grazing adjacent and in the wetland areas. Wetlands provide soil rentention and protection at pond edges.

Project wetlands cross or serve as state boundaries. N/A

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: Wetlands are associated with on-channel pond construction. Outlets exist and/or spills occur during precipitation events from ponds into connecting named and unnamed tributaries to the North Sulphur River.

Surface flow is: **Confined**

Characteristics:

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

☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

☒ Directly abutting – wetlands are created by and connected to pond pool elevations.

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain: There is an earthen berm east of the wetland.

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **2-year or less** floodplain.

(ii) Chemical Characteristics:

[7]Ibid.

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Herbaceous fringe varying in widths from 1 to more than 20 feet as part of 27 on-channel ponds. Wetlands perform water quality functions from overland flow to waters via filtration and sediment trapping, retention and nutrient transformation. Nutrient transformation from stream flow into ponds also accomplished.
Identify specific pollutants, if known: unknown.

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

☐ Riparian buffer. Characteristics (type, average width): .
☒ Vegetation type/percent cover. Explain: Eleocharis, Typha,
☐ Habitat for:
☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☒ Aquatic/wildlife diversity. Explain findings: Variation in vegetation communities compared to upland vegetation can provide minor habitat for occasional use of wetland and water dependent species.

3. Characteristics of all wetlands adjacent to tributaries (if any)

All wetland(s) being considered in the cumulative analysis: **25-30**
Approximately 10 acres in total are being considered in the cumulative analysis as identified in the delineation report at 27 on-channel ponds. Off-site desk top estimation was used to identify wetland fringes occurring with on-channel ponds. The higher resolution aerial photographs from 2014-2016 compared to those used in the 2006 PJD report facilitated in refinements of the previously identified (delineated) aquatic resources as well as identification in modifications to aquatic resources within the project area (erosional features, impoundments, etc.). These refinements to the delineated aquatic resources were performed as a "desktop" evaluation. To ground-truth observations from the desktop evaluation, field investigations were performed May 30 through June 2, 2017 to assess a representative sample area of portions of the 13,094-acre assessment area. These "on the ground" assessments aided in verification of identified aquatic resources from the desktop evaluation as well as to map the limits of potential waters of the U.S. identified both from the desktop evaluation and in the field. As an example, 14 of the 47 mapped on-channel ponds within the assessment area representing approximately 29.7 percent were investigated in the field. Lacustrine "fringe" wetland areas associated with the 14 on-channel ponds assessed in the field were observed and recorded in the field. The lacustrine wetlands, predominantly herbaceous emergent wetlands, represented approximately 3.4 acres of the 23.8 acres of the 14 on-channel ponds assessed or approximately 14.3 percent of the assessed on-channel pond acreage. This percentage of fringe wetlands was used to estimate the lacustrine wetland area associated with the total delineated area of on-channel impoundments within the assessment area that would be considered as hydraulically and hydrologically connected to waters of the U.S. Calculation of area of Lacustrine Fringe Wetlands (emergent) totaled 3.4 acres identified for 23.8 acres of 14 on-channel ponds that were field assessed. This equated to 14.3 percent of 69.9 acres of 47 on-channel ponds within assessment area resulting in the determination that slightly less than10 acres of on-channel fringe wetlands exist.

Summarize overall biological, chemical and physical functions being performed: See descriptions above.

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: The North Sulphur River totals 65,646 linear feet in the study area and is intermittent. Additionally, numerous ephemeral tributaries totaling 625,272 lineal feet have continuous ordinary high water marks that feed into the North Sulphur River. On said tributaries are 47 on channel ponds totaling 59.89 acres of open water. Wetland fringes associated with the ponds total 10 acres. All streams flow during and shortly after precipitation events allowing for biological and chemical contributions to the North Sulphur River which flows into Relatively Permanent Flow portions of the channel and eventually into the Sulphur River which is a TNW. Sediment, biota (including fish from on channel stock tanks) and organic matter are contributed to the North Sulphur River. Tributaries can also act as refugia during high flow events in the North Sulphur River. The tributaries and on channel wetlands also contribute as well as carry pollutants and flood waters to TNWs, can reduce amount of pollutants or flood water reaching a TNW, and transfer nutrients and organic carbon downstream.

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.**
   - ☒ 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: **690,918** linear feet and up to **45** width (ft).
   - ☒ Other non-wetland waters: **59.89** acres of on channel ponds.
     Identify type(s) of waters: On channel ponds.

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.

---

[8]See Footnote # 3.

Provide acreage estimates for jurisdictional wetlands in the review area: **10** 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.," (see **69.89** acres of on-channel ponds and associated fringe wetlands as detailed in this form), 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 Great Plains Regional Supplement.
☐ 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: Numerous stock tanks constructed in uplands exist as well as stock tanks that are not connected to tributaries to the North Sulphur River. Isolated forested wetlands also exist which are not adjacent due to significant channel degradation of North Sulphur River and are no longer connected to or have interaction with the river.
☐ 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: 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: 83 acres upland ponds/stock tanks.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 3.8 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.***

SECTION IV: DATA SOURCES.

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

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps:
- ☐ Corps navigable waters' study:
- ☒ U.S. Geological Survey Hydrologic Atlas:
  - ☐ USGS NHD data.
  - ☒ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: Greenville NW, Celeste, Pike, Wolfe City, Gober, Ladonia, Honey Grove and Dodd City.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Fannin.
- ☒ National wetlands inventory map(s). Cite name: See USGS quad map names.
- ☐ State/Local wetland inventory map(s):
- ☐ FEMA/FIRM maps:
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): 2003-2005 and 2014-2016 FSA NAIP and 2015 Texas Ortho-imagery Project.
  or ☒ Other (Name & Date): On site photos from 2006 delineation report and 2017 supplment.
- ☐ 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: