

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): October 19, 2020 ORM Number: SWF-2020-00251. Associated JDs: N/A

Review Area Location¹: State/Territory: Texas City: Melissa County/Parish/Borough: Collin Center Coordinates of Review Area: Latitude 33.282698 Longitude -96.568849

II. FINDINGS

- **A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.
 - □ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
 - □ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
 - There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
 - There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination			
N/A.	N/A.	N/A	N/A.	N/A.			

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³						
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination		
N/A.	N/A.	N/A.	N/A.	N/A.		

Tributaries ((a)(2) waters):						
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination		
IS1-Fitzhugh	41	linear	(a)(2) Intermittent	IS1 (Fitzhugh Branch) is a category (a)(2) water		
Branch		feet	tributary	since it has a clearly defined bed and bank and is an		
			contributes	intermittent tributary to Clemons Creek. Clemons		
			surface water	Creek flows directly into the East Fork Trinity River,		
			flow directly or	approximately 3.9 miles south of the project area.		
			indirectly to an	The East Fork Trinity River flows into the Trinity		
			(a)(1) water in a	River, a category (a)(1) water,		
			typical year.	approximately 54 miles south of the project area.		

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):						
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination		
N/A.	N/A.	N/A.	N/A.	N/A.		

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
SSW1	0.008	acre(s)	(a)(4) Wetland abuts an (a)(1)- (a)(3) water.	Wetland SSW1 is a category (a)(4) water. SSW1 is a result of a previous impoundment of a category (a)(2) water (Fitzhugh Branch, IS1). In accordance with current USACE guidance, an impounded water of the U.S., remains a water of the U.S. and is defined as a category (a)(3) water. Although the impoundment structure has failed and has been allowed to fill with sediment and vegetation, wetland SSW1 remains a water of the U.S. as category (a)(4) water.
EW1	0.113	acre(s)	(a)(4) Wetland abuts an (a)(1)- (a)(3) water.	Wetland EW1 is a category (a)(4) water. EW1 is a result of a previous impoundment of a category (a)(2) water (Fitzhugh Branch, IS1). In accordance with current USACE guidance, an impounded water of the U.S., remains a water of the U.S. and is defined as a category (a)(3) water. Although the impoundment structure has failed and has been allowed to fill with sediment and vegetation, wetland EW1 remains a water of the U.S. as category (a)(4) water.
FW1	0.058	acre(s)	(a)(4) Wetland abuts an (a)(1)- (a)(3) water.	Wetland FW1 is a category (a)(4) water. FW1 is a result of a previous impoundment of a category (a)(2) water (Fitzhugh Branch, IS1). In accordance with current USACE guidance, an impounded water of the U.S., remains a water of the U.S. and is defined as a category (a)(3) water. Although the impoundment structure has failed and has been allowed to fill with sediment and vegetation, wetland FW1 remains a water of the U.S. as category (a)(4) water.

D. Excluded Waters or Features



Excluded waters $((b)(1) - (b)(12))$. ⁴					
Exclusion Name	Exclusion	n Size	Exclusion ⁵	Rationale for Exclusion Determination	
ES1	771	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	ES1 does not appear on USGS topographic maps as an intermittent or perennial stream. ES1 does not flow continuously year-round and does not flow continuously during certain times of the year. ES1 only flows in response to multiple and repeated precipitation events. Observations made during the May 2020 and June 2020 field investigations occurred immediately after repeated precipitation events. ES1 does not contribute surface water flow to a category (a)(1) water in a typical year.	
SSW2	0.056	acre(s)	(b)(10) Stormwater control feature constructed or excavated in upland or in a non-jurisdictional water to convey, treat, infiltrate, or store stormwater runoff.	SSW2 does not appear on aerial photographs until around 2006-2010. These dates correspond with the addition of roadway and drainage improvements to Melissa Road on the western side of SH 5. Existing stormwater inlets collect stormwater runoff from impervious surfaces and convey them into an ephemeral upland man- made drainage ditch that eventually converges with Fitzhugh Branch. The existing stormwater inlets and ephemeral upland man-made drainage ditch were constructed in uplands and drain only uplands. It appears that this ephemeral upland man-made drainage ditch did not receive proper maintenance throughout the years and resulted in sedimentation and vegetation encroachment. Additionally, the current state of the ephemeral upland man-made drainage ditch did not occur until after the removal of Red River Street, which was previously located at the headwaters of Fitzhugh Branch. Red River Street is clearly seen on the 1984 aerial imagery and is used by vehicles to cross the ephemeral man-made drainage ditch. Based on this information, SSW2 is a result of the recent addition of diffuse stormwater runoff and directional sheet flow over uplands from nearby impervious surfaces and lack of maintenance. Additionally, the ephemeral upland man-made drainage ditch is a non-jurisdictional stormwater control feature that was excavated in	

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



EW₂

0.037

acre(s)

(b)(10) Stormwater

runoff.

control feature

constructed or

excavated in

upland or in a

non-jurisdictional water to convey,

treat, infiltrate, or store stormwater

U.S. ARMY CORPS OF ENGINEERS REGULATORY PROGRAM APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM) NAVIGABLE WATERS PROTECTION RULE

SSW3

0.020

acre(s)

(b)(10) Stormwater control feature constructed or excavated in upland or in a be considered a jurisdictional waters of the U.S since it does not meet the definition of a category (a)(1)-(a)(4) water. EW2 does not appear on aerial photographs until around 2006-2010. These dates correspond with the addition of roadway and drainage improvements to Melissa Road on the western side of SH 5. Existing stormwater inlets collect stormwater runoff from impervious surfaces and convey them into an ephemeral upland manmade drainage ditch that eventually converges with Fitzhugh Branch. The existing stormwater inlets and ephemeral upland man-made drainage ditch were constructed in uplands and drain only uplands. It appears that this ephemeral upland man-made drainage ditch did not receive proper maintenance throughout the vears and resulted in sedimentation and vegetation encroachment. Additionally, the current state of the ephemeral upland man-made drainage ditch did not occur until after the removal of Red River Street, which was previously located at the headwaters of Fitzhugh Branch. Red River Street is clearly seen on the 1984 aerial imagery and is used by vehicles to cross the ephemeral man-made drainage ditch. Based on this information. EW2 is a result of the recent addition of diffuse stormwater runoff and directional sheet flow over uplands from nearby impervious surfaces and lack of maintenance. Additionally, the ephemeral upland man-made drainage ditch is a non-jurisdictional stormwater control feature that was excavated in uplands to convey and store stormwater runoff. Thus, under USACE guidance, EW2 would not be considered a jurisdictional waters of the U.S since it does not meet the definition of a category (a)(1)-(a)(4) water. SSW3 does not appear on aerial photographs

uplands to convey and store stormwater runoff. Thus, under USACE guidance, SSW2 would not

ssw3 does not appear on aerial photographs until around 2006-2010. These dates correspond with the addition of roadway and drainage improvements to Melissa Road on the western side of SH 5. Existing stormwater inlets collect stormwater runoff from impervious surfaces and



non-jurisdictional water to convey, treat, infiltrate, or store stormwater runoff.

EW3

0.061

acre(s)

(b)(10) Stormwater control feature constructed or excavated in upland or in a non-jurisdictional water to convey, treat, infiltrate, or store stormwater runoff. convey them into an ephemeral upland manmade drainage ditch that eventually converges with Fitzhugh Branch. The existing stormwater inlets and ephemeral upland man-made drainage ditch were constructed in uplands and drain only uplands. It appears that this ephemeral upland man-made drainage ditch did not receive proper maintenance throughout the years and resulted in sedimentation and vegetation encroachment. Additionally, the current state of the ephemeral upland man-made drainage ditch did not occur until after the removal of Red River Street, which was previously located at the headwaters of Fitzhugh Branch. Red River Street is clearly seen on the 1984 aerial imagery and is used by vehicles to cross the ephemeral man-made drainage ditch. Based on this information. SSW3 is a result of the recent addition of diffuse stormwater runoff and directional sheet flow over uplands from nearby impervious surfaces and lack of maintenance. Additionally, the ephemeral upland man-made drainage ditch is a non-jurisdictional stormwater control feature that was excavated in uplands to convey and store stormwater runoff. Thus, under USACE guidance, SSW3 would not be considered a jurisdictional waters of the U.S. since it does not meet the definition of a category (a)(1)-(a)(4) water.

EW3 does not appear on aerial photographs until around 2006-2010. These dates correspond with the addition of roadway and drainage improvements to Melissa Road on the western side of SH 5. Existing stormwater inlets collect stormwater runoff from impervious surfaces and convey them into an ephemeral upland manmade drainage ditch that eventually converges with Fitzhugh Branch. The existing stormwater inlets and ephemeral upland man-made drainage ditch were constructed in uplands and drain only uplands. It appears that this ephemeral upland man-made drainage ditch did not receive proper maintenance throughout the years and resulted in sedimentation and vegetation encroachment. Additionally, the current state of the ephemeral upland man-made



				drainage ditch did not occur until after the removal of Red River Street, which was previously located at the headwaters of Fitzhugh Branch. Red River Street is clearly seen on the 1984 aerial imagery and is used by vehicles to cross the ephemeral man-made drainage ditch. Based on this information, EW3 is a result of the recent addition of diffuse stormwater runoff and directional sheet flow over uplands from nearby impervious surfaces and lack of maintenance. Additionally, the ephemeral upland man-made drainage ditch is a non-jurisdictional stormwater control feature that was excavated in uplands to convey and store stormwater runoff. Thus, under USACE guidance, EW3 would not be considered a jurisdictional waters of the U.S since it does not meet the definition of a category (a)(1)-(a)(4) water.
EW4	0.020	acre(s)	(b)(1) Non- adjacent wetland.	EW4 does not appear on NHD, NWI, or topographic maps. EW4 is located adjacent to and physically touches only an ephemeral stream (ES1). Thus, under USACE guidance, EW4 would not be considered a jurisdictional water of the U.S since it does not meet the definition of a category (a)(1)-(a)(4) water.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

Information submitted by, or on behalf of, the applicant/consultant: Jurisdictional Determination Report: Melissa Road Improvements, Collin County, Texas. Prepared for USACE-Fort Worth District and City of Melissa on June 24, 2020 by Cox|McLain Environmental Consulting, Inc.

This information is sufficient for purposes of this AJD. Rationale: $\ensuremath{\mathsf{N/A}}$

Data sheets prepared by the Corps: Title(s) and/or date(s).

Photographs: Aerial: Agriculture and Soil Conservation Service, 1942. Army Mapping Service, 1952. Agriculture and Soil Conservation Service, 1964. Agriculture and Soil Conservation Service, 1972. National High Altitude Photography, 1981. Texas Department of Transportation, 1984. US Geological Survey, 1995. National Agriculture Information Program, 2004. National Agriculture Information Program, 2005. National Agriculture Information Program, 2006. National Agriculture Information Program, 2010. National Agriculture Information Program, 2012. National Agriculture Information Program, 2014. National Agriculture Information Program, 2015. National Agriculture Information Program, 2016. National Agriculture Information Program, 2018.

- \Box Corps site visit(s) conducted on: Date(s).
- □ Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).



Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

USDA NRCS Soil Survey: Natural Resources Conservation Service (NRCS). 2020a. Web Soil Survey 2.3—National Cooperative Soil Survey: Collin County, Texas. United States Department of Agriculture NRCS. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed June 4, 2020.

☑ USFWS NWI maps: USFWS, NWI, 2019. Accessed on June 24, 2020.

☑ USGS topographic maps: Anna, 1961, 2010, 2013, 2016, 2019, and 2020. McKinney, 1985. Sherman, 1954 and 1958.

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	Natural Resources Conservation Service (NRCS). 2020. WETS data.
	http://agacis.rcc-acis.org/. Accessed on May 18, 2020
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	Federal Emergency Management Agency (FEMA). 2020. Federal Insurance
	Rate Maps (FIRMs) –
	Map # 48085C0165J. Accessed June 9, 2020.

Other data sources used to aid in this determination:

- B. Typical year assessment(s): To determine the normality of rainfall at the time of the field investigations, both current rainfall data and historical data were obtained from the closest NRCS Climate Analysis for Wetlands Tables (WETS) Station located at McKinney Municipal Airport, Texas, approximately 7.5 miles south of the project area (NRCS 2020b). Current conditions were determined by the NRCS method (NRCS 1997). Based on these calculations, normal conditions were present during the time of the May 2020 and June 2020 field investigations.
- **C.** Additional comments to support AJD: A delineation of waters of the U.S., including wetlands, was conducted within the project area for the proposed improvements to Melissa Road in the City of Melissa, Collin County, Texas. The wetland delineation resulted in the identification of ten aquatic features, including one intermittent stream, one ephemeral stream, one forested wetland, three shrub/scrub wetlands, and four emergent wetlands within the project area during the field investigations performed in May 2020 and June 2020.

Of the ten aquatic features, four meet the current definition of a water of the U.S. (category (a)(2) waters and category (a)(4) waters). At Crossing 1, aquatic features IS1, SSW1, EW1, and FW1 are jurisdictional waters of the U.S. (category (a)(2) waters and category (a)(4) waters).

Additionally, six aquatic features which do not meet the definition of waters of the U.S. (SSW2, EW2, SSW3, EW3, EW4 and ES1) are located within the project area. Aquatic features SSW2, EW2, SSW3, and EW3 are located within an ephemeral upland man-made drainage ditch that conveys diffuse stormwater runoff and directional sheet flow over uplands from nearby impervious surfaces. Additionally, the ephemeral upland man-made drainage ditch is a non-jurisdictional stormwater control feature that was excavated in uplands to convey and store stormwater runoff. ES1 does not flow continuously year-round and does not flow continuously during certain times of the year. ES1 only flows in response to multiple and repeated precipitation events. Observations made during the May 2020 and June 2020 field investigations



occurred immediately after repeated precipitation events. ES1 does not contribute surface water flow to a category (a)(1) water in a typical year. EW4 does not appear on NHD, NWI, or topographic maps. EW4 is located adjacent to and physically touches only an ephemeral stream (ES1). Thus, under USACE guidance, EW4 would not be considered a jurisdictional water of the U.S since it does not meet the definition of a category (a)(1)-(a)(4) water.







