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

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 8/4/2020
ORM Number: MVS-2018-758 City of Centralia Wastewater System Improvements
Associated JDs: N/A
Review Area Location[1]: State/Territory: MO City: Centralia County/Parish/Borough: Audrain & Boone

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]

[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.

§ 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
Feature 1 & 2 - Unnamed Tributary to Young's Creek	200	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Rerouted intermittent upper branch to Young's Creek around the existing City wastewater basins. Flow visible in all aerial photography, during various seasons, within the stream channel, which due to its channelization is clearly visible without any riparian obstructions. Young's Creek joins Long Branch briefly before flowing into the Salt River (at Mark Twain Lake which has perennial discharge from the impoundment), an primary tributary to the Mississippi River an (a)(1) navigable water.
Feature 14- Unnamed Tributary to Young's Creek 4	200	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Unnamed branch to Young's Creek, which receives flow from several ephemeral upper branches. Water present in channel visible in all aerial photography accessed, which includes captures during various seasons, within the stream channel, which has a forested riparian. Young's Creek joins Long Branch briefly before flowing into the Salt River (at Mark Twain Lake), an primary tributary to the Mississippi River an (a)(1) navigable water.
Feature 15- Unnamed Tributary to Goodwater Creek 1	100	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Downstream most extent of branches of flow to Goodwater Creek. Regular flow visible in all aerial photography, during various seasons, within the stream channel, which due to the removal of riparian vegetation is clearly visible. The tributary flows to Goodwater Creek, then into Young's Creek which joins Long Branch briefly before flowing into the Salt River at Mark Twain Lake, an primary tributary to the Mississippi River an (a)(1) navigable water.
Feature 19- Unnamed Tributary to Long Branch 1	200	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Downstream-most reach of intermittent branch to main stem of Long Branch. Flow visible in all aerial photography, during various seasons, within the stream channel and on-site conditions suggested routine flow in the channel with regular pools and continued flow for numerous months of the year. The unnamed tributary flows into Long Branch, which then flows into the Salt Rive (at Mark Twain

[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.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				Lake), a primary tributary to the Mississippi River an (a)(1) navigable water.
Feature 29-Unnamed tributary to Long Branch 2	300	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Perennial tributary with flow year round supporting fish species observed in the stream channel. The tributary flows to Goodwater Creek, then into Young's Creek which joins Long Branch briefly before flowing into the Salt River at Mark Twain Lake, an primary tributary to the Mississippi River an (a)(1) navigable water.
Feature 33-Long Branch	300	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Perennial tributary with flow year round supporting fish species observed in the stream channel. Long Branch flows into the Salt River (at Mark Twain Lake), a primary tributary to the Mississippi River an (a)(1) navigable water.

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
Feature 28 – Adjacent forested wetland	0.09	acres	(a)(4) Wetland abuts an (a)(1)-(a)(3) water & Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year	Forested wetland feature that abuts the unnamed tributary to Long Branch. The area also appears to be inundated within a typical year through this area from the presence of drift deposits and the location being mapped within the FEMA flood zone.
Feature 32 – Adjacent emergent wetland	0.1	acres	(a)(4) Wetland separated from an (a)(1)-(a)(3) water only by a natural feature & (a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Emergent wetland feature that is separated by a natural sediment "levee" deposited just outside of the top of bank of the large Long Branch perennial channel. The wetland is also inundated within a typical year through this area from the presence of drift deposits and the location being mapped within the FEMA flood zone.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]

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Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
Features: 4 & 6	See Section C.	N/A.	(b)(1) Non-adjacent wetland.	Wetland features were created in the areas where soils were bermed to create the shallow waste water basins. These wetland areas are not adjacent nor do they have a jurisdictional connection to any WOTUS.
Features: 8, 9, 10, 11, 16, 22 & 23	See Section C.	N/A.	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Drainage features in the upper most portions of the watershed that concentrate surface water runoff from the adjacent uplands that flow directly in response to precipitation. These areas discharge into downstream (a)(2) tributaries.
Features: 13, 17, 18, 21, 25, 26, 27 & 30	See Section C.	N/A.	(b)(5) Ditch that is not an (a)(1) or (a)(2) water, and those portions of a ditch constructed in an (a)(4) water that do not satisfy the conditions of (c)(1).	Drainage features constructed in uplands or excavated in ephemeral (b)(3) excluded waters. These features do not relocate a jurisdictional tributary, are not constructed in a tributary, nor constructed in an adjacent wetland.
Features: 20, 24 & 31	See Section C.	N/A.	(b)(6) Prior converted cropland.	Areas with wetlands signatures according to Google Earth aerials that were determined to all be under active cultivation from site visit observations and a review of Google Earth aerial photography. A review of old aerials and historical maps confirmed that these areas were manipulated to support agricultural use prior to December 23, 1985.
Features: 12	See Section C.	N/A.	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	Small farm pond excavated wholly in uplands. The pond does not impound a drainage draw, where surface waters are concentrated, and captures a limited amount of overland flow. The pond is adjacent to a drainage feature that would likely be considered a drainage ditch and there is little evidence of any normal discharge into the adjacent drainage from the pond.
Features: 3, 5 & 7	See Section	N/A.	(b)(12) Waste treatment system.	Shallow graded basins to contain the land application of wastewater, which has created

[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.

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
	C.			sustained hydrology in an upland setting.

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: Title(s) and date(s)
This information is not sufficient for purposes of this AJD.
Rationale: The submitted plans sheets only outlined the proposed work and do not call out all of the stream and aquatic resource crossings. The plans sheets were sufficient to determine locations for review for Corps to evaluate the presence or absence of waters.

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

☐ Photographs: Select. Title(s) and/or date(s).

☒ Corps site visit(s) conducted on: July 14, 2020

☐ 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: Web Soil Survey, quieried July 8-10, 2020

☒ USFWS NWI maps: USFWS - Google Earth KML linked layer, quieiried July 8-10, 2020

☒ USGS topographic maps: 1985: Moberly -1:100,000; 2017: Tulip, Centralia NE, Rowena - 1:24000; Source: https://ngmdb.usgs.gov/topoview/viewer

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	FEMA Flood Zone Layer – access through USACE ORM map on July 8, 2020

B. Typical year assessment(s): N/A or provide typical year assessment for each relevant data source used to support the conclusions in the AJD.

C. Additional comments to support AJD:

Excluded Features:

(b)(1) Non-adjacent wetland.

Features: 4-City Storage Basin Wetland B (0.43 acres) & 6-City Storage Basin Wetland D (0.29 acres).

Description: The borrow areas used to create the low berms along the waste treatment basin areas (features 3, 5, & 7). These scrape areas, located at base of berms trap water in a previously upland area that has created wetland features in the shallow pits that do not have a jurisdictional connection nor adjacency to jurisdictional waters and therefore are excluded, (b)(1) non-adjacent wetland, features.

(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.

Features: 8- Ephmeral unnamed tributary to Young's Creek 2 (100 ln ft), 9 (100 ln ft), 10 (100 ln ft) & 11 -

Ephemeral branch unnamed tributary to Young's Creek 3 (100 ln ft), 16-Ephemeral branch unnamed tributary to Goodwater Creek 2 (100 ln ft)& 22 (100 ln ft) & 23-Ephemeral unnamed tributary to Long Branch 2 (100 ln ft).
Description: Excluded phemeral features that contribute flow following rainfall events into a(2) tributaries The majority of these features are low gradient channel slope within an agricultural setting.

(b)(5) Ditch that is not an (a)(1) or (a)(2) water, and those portions of a ditch constructed in an (a)(4) water that do not satisfy the conditions of (c)(1).
Features: 13-Grass-lined waterway at Rhodes Basin (500 ln ft), 17-Grass-lined waterway at March Road Main Crossing 2 (100 ln ft), 18-Grass-lined waterway at March Road Main Crossing 3 (100 ln ft), 21-Grass-lined waterway at Force main to Benoit Basin Crossing 2 (100 ln ft), 25-Ditch at Force main to Benoit Field Crossing 1 (100 ln ft), 26- Ditch at Force main to Benoit Field Crossing 2 (100 ln ft), 27- Ditch at Force main to Benoit Field Crossing 3 (100 ln ft) & 30- Ditch at Force main to Benoit Field Crossing 4 (100 ln ft).
Description: Ditch features within agricultutural fields that may or may not contribute ephemeral flows to an (a)(2) tributary.

(b)(6) Prior converted cropland.
Features: 20-PCC at Force main to Benoit Basin Crossing 1 (0.09 acres), 24-PCC at Benoit Basin Construction (1.68 acres) & 31-PCC at Force main to Benoit Field Crossing 5 (0.06 acres).
Description: Areas within agricultural row crop fields that exhibit wetland signatures in aerial photography over multiple years that was converted into agricultural production prior to 1986.

(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).
Feature: 12-Pond at Irrigation City Field (1.65 acres).
Description: Pond constructed in uplands, not impounding a WOTUS, that rarely would discharge into downstream tributaries.

(b)(12) Waste treatment system
Features: 3-City Storage Basin Wetland A (3.7 acres), 5-City Storage Basin Wetland C (3.32 acres) & 7-City Storage Basin Wetland E (3.7 acres).
Description: These are areas where shallow basins were excavated within a agricultural field then land application of wastewater was applied, creating an artificial hydrology to the site.