



**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): 2/10/2021
 ORM Number: MVS-2020-650
 Associated JDs: N/A
 Review Area Location¹: State/Territory: MO City: Kirksville County/Parish/Borough: Adair
 Center Coordinates of Review Area: Latitude 40.170628 Longitude -92.574357

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
Bear Creek	300	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	The stream had sustained and substantial perennial flow at the time of the site visit. The stream at this location drains a 1500-acre watershed area, with approximately 60% of the area being developed portions of the City of Kirksville. In addition to the substantial surface water inflows groundwater also contributes to flows, which then supports perennial flow within Bear Creek in a typical year. The stream is mapped in all USGS maps and USFWS NWI layers as a perennial stream channel. Bear Creek is a primary tributary to the North Fork of the Salt

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.



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Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				River, the Salt River is impounded by Mark Twain lake which contributes perennial flow downstream to the Salt River, which ultimately flows to the (a)(1) navigable Mississippi River.
Intermittent Stream	530	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	At the time of the site visit consistent flow from the S. Franklin St. culvert and through the stream length through the review area, that was not in direct response to rainfall. With the smaller watershed area, groundwater contributes flow to the tributary to provide intermittent flow within a typical year. Through the length on site, a defined stream channels with well-established meanders and gravel bars present in the channel. Mapped as an intermittent stream channel upstream in early USGS maps but later maps do not show a blue line but do reflect topographic relief associated with stream channels/drainage features. A portion of the upstream/gradient portions of the channel has been piped but a defined channel exists upstream of the piped segment in aerial images. Within the review area the intermittent tributary flows into Bear Creek, which flows to the North Fork of the Salt River, the Salt River is impounded by Mark Twain lake which contributes perennial flow downstream to the Salt River, which ultimately flows to the (a)(1) navigable Mississippi River.

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
Linear Wetland	0.01	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	The linear wetland abuts an (a)(2) tributary, Bear Creek, and is also likely inundated by Bear Creek during a typical year however because the documentation on this lacking it was not the justification for meeting adjacent wetland definition. The wetland has a direct hydrological surface connection to Bear Creek. The wetland was also reviewed to assure that it did not meet the definition of an excluded water. The site original features: an area at the confluence of an intermittent tributary with a perennial tributary, located within the floodplain of that perennial tributary, and in an area with mapped hydric soils; like would have originally supported wetlands and that this wetland area at the



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Adjacent wetlands ((a)(4) waters):			
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
			edge of the property is a part of those original features that was not impacted by the site filling. The site filling may have also increase hydrology in these areas as site drainage was disrupted by the filling activities. As the wetland did not meet the definition of any of the exclusions and does, actively, met the definition of an adjacent wetland

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
N/A.	N/A.	N/A.	N/A.

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: 14846 Site Plan 1-21-21 & 14846 SWPPP 1-21-21

This information is sufficient for purposes of this AJD.

Rationale: The site plans provide a topographic survey which was helpful in evaluating site microtopography and resources identified during site visit were included in the survey.

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

Photographs: Aerial: Google Earth Aerial Photography: 4/1/1995, 6/14/2005, 6/14/2007, 9/10/2012, 7/13/2015

Corps site visit(s) conducted on: 11/17/2020

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: USDA-NRCS SoilWeb linked Google Earth layer, queried 2/10/21

USFWS NWI maps: FWS Wetlands & Riparian linked Google Earth layer, queried 2/10/2021

USGS topographic maps: USGS TopoViewer 1938 Kirksville 1:62,500; 1979 & 2017 Kirksville 1:24,000; 1974 Aerial Imagery

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	N/A.

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.



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- B. Typical year assessment(s):** The Corps site visit to the property was completed during a period of normal conditions, with typical rainfall quantities at the time of the site visit. In the two month preceeding the majority of the month rainfall quantities were lower than 30 year normal typical rainfall quantities. These conditions were considered in the determination considerations.
- C. Additional comments to support AJD:** The review area has seen previous filling activities from former landowners. The review area is within the regulated floodplain, the floodwaters on site are focused along the intermittent tributary and the center of the site, because the areas directly beside Bear Creek have had previous fills and are the highest topography on the site. Previous fills may have been an effort to create a berm to keep Bear Creek floodwaters from the building on site or an effort to eleveate the entire site by filling that was not entirely completed.