



**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): 2/3/2021

ORM Number: MVS-2021-35

Associated JDs: N/A

Review Area Location¹: State/Territory: Missouri City: Mexico County/Parish/Borough: Audrain

Center Coordinates of Review Area: Latitude 39.16208 Longitude -91.86042

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
- 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.

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.

Tributaries ((a)(2) waters):			
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
Channel A.1	2,600	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.
Channel A.2	950	linear feet	(a)(2) Intermittent tributary contributes

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
		surface water flow directly or indirectly to an (a)(1) water in a typical year.	following a local rain event. Also, have structure that includes an OHWM and bed/bank system.

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.

Adjacent wetlands ((a)(4) waters):			
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
Surface Water 1.A	0.02	acre(s)	(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).	The pond is generally silted in with emergent vegetation growing in most of the pond. This water is located on an ephemeral drainage.
Surface Water 1.B	0.10	acre(s)	(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	An approximate 0.10-acre man-made pond on the North Parcel. This Pond has an approximate 30-foot fringe of emergent wetland and the remainder the pond appears as deeper water without emergent vegetation. This wetland is located on an ephemeral drainage.

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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Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
			water that meets (c)(6).	
Surface Water 1.C	0.10	acre(s)	(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).	An approximate 0.10-acre man-made pond on the North Parcel. The pond is generally silted in with emergent vegetation growing in most of the pond. This wetland is located on an ephemeral drainage.
Excavated Pits	0.98	acre(s)	(b)(9) Water-filled depression constructed/excavated in upland/non-jurisdictional water incidental to mining/construction or pit excavated in upland/non-jurisdictional water to obtain fill/sand/gravel.	Two adjacent excavations with a total of approximately 0.98-acres of surface area. The pits have approximately 15-20-foot fringe of emergent wetland and the remainder appears as deep water without emergent vegetation. The pits are generally isolated and do not have outflow structures.
Surface Water 2.A	0.02	acre(s)	(b)(1) Non-adjacent wetland.	An approximate 0.02-acre depressional area on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.
Surface Water 2.B	0.10	acre(s)	(b)(1) Non-adjacent wetland.	An approximate 0.10-acre depressional area on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.
Surface Water 2.C	0.04	acre(s)	(b)(1) Non-adjacent wetland.	An approximate 0.04-acre depressional area on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.
Surface Water 2.D	0.20	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-	An approximate 0.20-acre man-made excavation on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.



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Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
			jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	
Surface Water 2.E	0.22	acre(s)	(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).	An approximate 0.22-acre man-made excavation on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.

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: [Terracon Consultants, Inc.](#)
This information is sufficient for purposes of this AJD.
Rationale: [Provides field data, pictures, rainfall measurements, maps, etc.](#)
- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\)](#).
- Photographs: [Aerial and Other: Appendix A,B,C,D,E](#)
- 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: [Appendix A,B,C,D,E](#)
- USFWS NWI maps: [Appendix A,B,C,D,E](#)
- USGS topographic maps: [Appendix A,B,C,D,E](#)

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.



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Data Source (select)	Name and/or date and other relevant information
Other Sources	N/A.

B. Typical year assessment(s): Reviewed data from the USGS Stream Stats website and rainfall data from the National Oceanic and Atmospheric Administration (NOAA) website. The USGS stream data indicates Channel A.1 drains approximately 179 acres at the point where Channel A.1 flows off the site property and this includes approximately 64 acres of drainage associated Channel A.2 a tributary to Channel A.1. The NOAA data for a weather station in Centralia, Missouri (Centralia 1.5 N MO US US1MOBN0070) indicates a precipitation event on November 14, 2020 resulted in the accumulation of approximately 0.37 inches and a precipitation event on November 15, 2020 resulted in the accumulation of approximately 0.28 inches. The approximate accumulated precipitation in the site area was 0.65 inches within the two days of the field visit.

C. Additional comments to support AJD:

North Parcel: The parcel appears to be generally cropland with wooded areas on the southeast, and southwest portions of the parcel. Within the wooded area on the southeast portion there are two channels (Channel A.1 and Channel A.2) located within the southeast wooded area. Two ponds is located on an apparent ephemeral tributaries to Channel A.1 (Surface Water 1.A and Surface Water 1.B). Starting in approximately 2012, two ponds (Excavated Pits) are visible on the northwest portion of the site. There are numerous ephemeral channels, waterways and/or erosional features depicted with hatched yellow lines throughout the parcel.

Southwest Parcel: The parcel appears to be generally cropland with a wooded area on the northeast portion of the parcel. A pair of ephemeral channels are apparent on the south-central and southwest portions of the parcel (depicted by yellow hatched lines).

Southeast Parcel: The parcel appears to be generally grassland. Two ponds (Surface Water 2.C and Surface Water 2.D) are visible on the southwest and southeast portion of the parcel. A pair of ephemeral channels are apparent on the west-central and east-central portions of the parcel (depicted by yellow hatched lines).

Observations identified two well defined stream channels on the North Parcel (intermittent to ephemeral in nature). The following is a general description of the onsite drainage system:

- Channel A.1 is a segment of a stream that crosses the southern portion of the North Parcel. It flows onto the site on the east-central portion of the North Parcel and flows off on the south-central portion. There is approximately 2,500 feet of channel on located on the North Parcel.
- Channel A.2 is a segment of a stream that tributary of Channel A.1 located on the North Parcel. Channel A.2 flows onto the North Parcel on northeast portion and converges with Channel A.1 on the east-central portion.

The approximate locations of the above surface waters are depicted on Figures 2.0, and 2.2 in Appendix A.

There were numerous drainages that appeared as upland swales or man-made agricultural waterways on the three parcels (depicted as yellow hatched lines on the attached figures). These drainages lacked well-defined bed and bank systems, ordinary high water marks (OHWM) or other indications of significant flow. Channel characteristics are detailed in data sheets located in Appendix E. This data includes channel



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information for Channel A.1 (Data points SS1, SS2 and SS3), channel information for Channel A.2 (Data points NS 1 and NS2) as well as various channel information for typical swales and waterways (Data Points EE1, NC1, NC2, WE1, WE2, WE3 and SD1) that are representative of the channel structure seen in these types of drainages across the three parcels. The approximate locations where the cross section data was collected is depicted on Figures 2.3 and 2.4 in Appendix A.

Wetland Observations:

Wetland areas were observed on the three parcels. Data from nine (9) potential wetland areas that were identified during the preliminary data review or observed during the site reconnaissance were collected and for the three parcels.

North Parcel

Surface Water 1.A – Sample Plots MW1 and MW2
Surface Water 1.B – Sample Plots MW3 and MW4
Excavated Pits – Sample Plots MW5 and MW6
Surface Water 1.B – Sample Plots MW 7 and MW8

Southwest Parcel

North Depression – Sample Plot SC1
Southeast Depression – Sample Plot SC2

Southeast Parcel

Surface Water 2.A – Sample Plots SE1 and SE2
Surface Water 2.B – Sample Plots SE7 and SE8
Surface Water 2.C – Sample Plots SE9 and SE10
Surface Water 2.D – Sample Plots SE5 and SE6
Surface Water 2.E – Sample Plots SE3 and SE4

Field Summary

Drainages

Based on field observations and review of topographic maps Channel A.1 and Channel A.2 have structure that includes an OHWM and bed/bank system. Furthermore, these drainages had flow and/or standing water at the time of the field visit. The visit was conducted approximate 48 to 24 hours following two rain events that accumulated approximately 0.65 inches of rain in the site area. The flow in Channels A.1 and A.2 was very low; however, both had pooling over water throughout most of their channels. There is an approximate 2,600-foot reach of Channel A.1 on the site property and an approximate 950-foot reach of Channel A.2 on the site. The remaining channels and waterways on the site parcels do not exhibit continuous OHWMs or bed/bank systems and most of these drainages have none of these characteristics. These additional channels and waterways generally did not have flow or areas of standing water. The exception is a segment of channel on the western portion that had standing water in a portion of the channel and is the location where wetland samples MW7 and MW8 were collected. The remainder of this western channel did not have significant physical characteristics or flow

Wetlands

Based on USACE criteria the following areas exhibited the three wetland characteristics at sample points



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collected during the site visit. Below is a brief description of each surface water and an estimation of area based on field data and review of aerial images.

- Surface Water 1.A – An approximate 0.02-acre man-made pond on the North Parcel. The pond is generally silted in with emergent vegetation growing in most of the pond. This wetland is located on an ephemeral drainage.
- Surface Water 1.B – An approximate 0.10-acre man-made pond on the North Parcel. This Pond has an approximate 30-foot fringe of emergent wetland and the remainder the pond appears as deeper water without emergent vegetation. This wetland is located on an ephemeral drainage.
- Surface Water 1.C – An approximate 0.10-acre man-made pond on the North Parcel. The pond is generally silted in with emergent vegetation growing in most of the pond. This wetland is located on an ephemeral drainage.
- Excavated Pits – Two adjacent excavation with a total of approximately 0.98-acres of surface area. The pits have approximately 15-20-foot fringe of emergent wetland and the remainder appears as deep water without emergent vegetation. The pits are generally isolated and do not have outflow structures.
- Surface Water 2.A – An approximate 0.02-acre depressional area on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.
- Surface Water 2.B – An approximate 0.10-acre depressional area on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.
- Surface Water 2.C – An approximate 0.04-acre depressional area on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.
- Surface Water 2.D – An approximate 0.20-acre man-made excavation on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.
- Surface Water 2.E – An approximate 0.22-acre man-made excavation on the Southeast Parcel. This surface water is generally isolated and overflow into ephemeral drainages and swales.

Samples collected in depressional areas on the Southwest Parcel did not exhibit wetland characteristics.

A Preliminary Waters of the U.S. Assessment was conducted for property located west of Highway 54 on the southeast side of Mexico Missouri. The site consists of three parcels (north parcel approximately 200 acres, southwest parcel of approximately 40 acres and southeast parcel of approximately 50 acres) located in Audrain County, Missouri and covering portions of Sections 31 and 32, Range 8 West Township 51 North, and Section 36, Range 7 West, Township 51 North. This PWOTUS involved a review of the site utilizing readily available information (e.g. USGS topographic map, aerial photographs, a USFWS NWI map, and NRCS Web Soil Survey data), and a site reconnaissance to evaluate and document the site for potential jurisdictional WOTUS. The site reconnaissance was conducted on November 17, 2020. Samples collected in nine areas that included surface waters and depressional areas appeared to exhibited



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wetland characteristics. However, these wetland areas are isolated or located adjacent to apparently non-jurisdictional waters. Therefore, based on the guidance in the USACE June 2020 NWPR, these wetland areas do not appear to be jurisdictional waters.

The majority of the drainages and waterways on the site appear to be ephemeral in nature and under the guidelines of the NWPR do not appear to be jurisdictional. The exception to this appears to be two channels on the North Parcel that appear to have jurisdictional characteristics.

- Channel A.1 (approximate 2,600-feet on the site), and
- Channel A.2 (approximately 950-feet on the site)

The NWPR indicates that streams with intermittent flow may be considered jurisdictional waters. Based on the observations at the time of the reconnaissance Channels A.1 and A.2 exhibited low to moderate flow. The site visit that was conducted approximate 24 to 48 hours following a local rain event. Flow in these streams also may be affected by impacts upstream and downstream (culverts and other man-made stream obstructions) resulting in conditions that complicate the evaluation of flow following a precipitation event. It should be understood that the evaluation of Channels A.1 and A.2 were based on limited data collected with a single field event and local precipitation data is based on data for the general site area. Collecting additional data with onsite precipitation data and evaluation of offsite drainage areas that contribute to the flow of the onsite channel segments may result in a more comprehensive determination on the flow and the jurisdiction of Channels A.1 and A.2