



**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): 7/13/2020
 ORM Number: MVS-2018-636
 Associated JDs: N/A
 Review Area Location¹: State/Territory: Missouri City: O'Fallon County/Parish/Borough: St. Charles
 Center Coordinates of Review Area: Latitude 38.7809 Longitude -90.7443

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.

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
Tributary A	815 linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	The channel extends from the neighboring development and is depicted as a blue line on topo maps. Field Determination observed waterline, natural line impressed in bank (vegetation line), sediment deposits, sediment sorting as well as bed and bank. OHWM width ranged from 2-8' width water depths 2 to 6 inches.

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.



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

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
N/A.	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
Pond A	0.32	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).	Topography maps points towards the direction that pond was constructed in dry land.
Wetland A	0.10	acre(s)	(b)(1) Non-adjacent wetland.	An ephemeral drainage feature is located just downstream of the depressional area.
Tributary B	395	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Trib. Began at the convergence of two Ag. Drainages. Shortly after the project site, the drainage flows into a culvert underneath Yard Drive. The tributary had a bank width of 1-6' and height of 1-3'.
Tributary C	440	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Trib. Began at the edge of forested communities, downslope of discontinuous ag. Drainages. Trib. lies in areas identified as "U" shaped contour on topo map. The tributary had a bank width of 1-5' and being incised 1-6' into the landscape.
Tributary D	100	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Trib. Began at the edge of forested communities, downslope of discontinuous ag. Drainages. Trib. lies in areas identified as "U" shaped contour on topo map. The tributary had a bank width of 1-5' and being incised 1-6' into the landscape.
Tributary E	285	linear feet	(b)(3) Ephemeral feature, including an ephemeral	Trib. Began at the edge of forested communities, downslope of discontinuous ag. Drainages. Trib. lies in areas identified as "U" shaped contour on

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.



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

Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
		stream, swale, gully, rill, or pool.	topo map. The tributary had a bank width of 1-5' and being incised 1-6' into the landscape.

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: [Bopp Tract \(Inverness\)](#)

[Wetland/Waterbody Delineation, September 2018](#)

This information is sufficient for purposes of this AJD.

Rationale: [The delineation was a concurred with during a Corps' June 2018 Site Visit.](#)

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

Photographs: [Aerial and Other: Within the September 2018 Delineation Submittal](#)

Corps site visit(s) conducted on: [June 2018](#)

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: [Title\(s\) and/or date\(s\).](#)

USFWS NWI maps: [Within the September 2018 Delineation Submittal](#)

USGS topographic maps: [Within the September 2018 Delineation Submittal](#)

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.

B. Typical year assessment(s): [The United States Geological Survey \(USGS\) topographic map and National Wetlands Inventory \(NWI\) map were also reviewed for information concerning the site. The USGS and NWI maps depict one blue line tributary and one freshwater pond \(PUB\) within the boundaries of the project site. The project site appeared, upon review of the USGS, NWI and aerial imagery, to be dominated by active agricultural fields along an upland ridge. Several surface drainage features and grassland swales can be observed throughout the agricultural fields extending downslope to fragmented forested communities along the limits of the project site. The blue line tributary is also surrounded by a forested community.](#)

C. Additional comments to support AJD: [Tributary A was an intermittent tributary observed extending from the neighboring residential development downslope to a culvert inlet along the westernmost boundary of the project site. The tributary was depicted as a blue line feature on the USGS topographic map and was delineated in the field based on an OHWM identified by the waterline, a natural line impressed in the bank, the destruction of terrestrial vegetation, sediment deposits, and sediment sorting as well as a bed and bank. The OHWM width ranged from approximately 2 feet to 8 feet wide with water depths varying between 2 to 6 inches. Although water was present throughout the length of the channel, limited flow was](#)



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

observed during the site evaluation.

Tributary B began at the convergence of two discontinuous agricultural field drainage features within the northwestern forested corner of the project site where sheet flow from the surrounding forested areas and agricultural fields gathers enough velocity and volume to scour the soil surface. The ephemeral tributary continues downslope before ultimately exiting the project site at its northern boundary. Shortly after exiting the project site, Tributary B enters a culvert inlet and goes underneath Yard Drive. The tributary was observed with an OHWM and bed and bank. The tributary's OHWM was approximately 1 to 6 feet in width while the banks were 1 to 3 feet in height. The channel substrate composition was largely gravel and fine sediments including sand, silt, and clay.

Tributaries C, D, and E were ephemeral tributaries observed initiating along the edge of forested vegetation communities, downslope of discontinuous agricultural drainages. These tributaries lie in areas which were identified as "U-" shaped contours by the USGS topographic map. Each tributary was delineated by an OHWM with bed and bank, but with average OHWM's ranging from 1 to 5 feet wide and being incised 1 to 6 feet into the landscape. The channels substrate was comprised of fine sediments such as silt and clay and limited gravel and cobble. Water was present throughout the length of the channels; however limited flow was observed during the site evaluation.

Jurisdictional Determination Review Area (ephemeral streams)

TRIBUTARY E
285 LF ON SITE
285 LF IMPACTED
(140 RETENTION, 145 GRADING)

WETLAND A
NON-JURISDICTIONAL
0.10 AC

TRIBUTARY C
440 LF ON SITE
440 LF IMPACTED
(235 RETENTION, 205 GRADING)

Ephemeral Stream- Mitigation already provided and impacts have already occurred

POND A
NON-JURISDICTIONAL
0.32 AC





TRIBUTARY D
100 LF ON SITE
100 LF IMPACTED
(60 RETENTION, 40 GRADING)

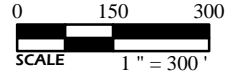
Jurisdictional Determination Review Area (ephemeral stream)

Intermittent Tributary- Still jurisdictional under Navigable Waters Protection Rule (2020)


TRIBUTARY B
395 LF ON SITE
235 LF IMPACTED
(105 RETENTION, 135 GRADING)


TRIBUTARY A
815 LF ON SITE
815 LF IMPACTED
(385 RETENTION, 430 GRADING)

-  INDICATES APPROXIMATE SOIL BORING LOCATION
-  TRIBUTARIES
-  POND
-  WETLAND



GENERAL NOTES/LEGEND

 INDICATES APPROXIMATE SOIL BORING LOCATION.

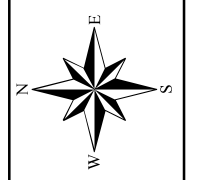
 INDICATES APPROXIMATE LOCATION AND DIRECTION OF PHOTOGRAPH

PLAN DATED 9/04/2018 BY VOLZ, INC.

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

PROJECT NAME
BOPP TRACT
ST CHARLES COUNTY, MISSOURI

PREFERRED ALTERNATIVE



JOB NUMBER
2018-0405.31

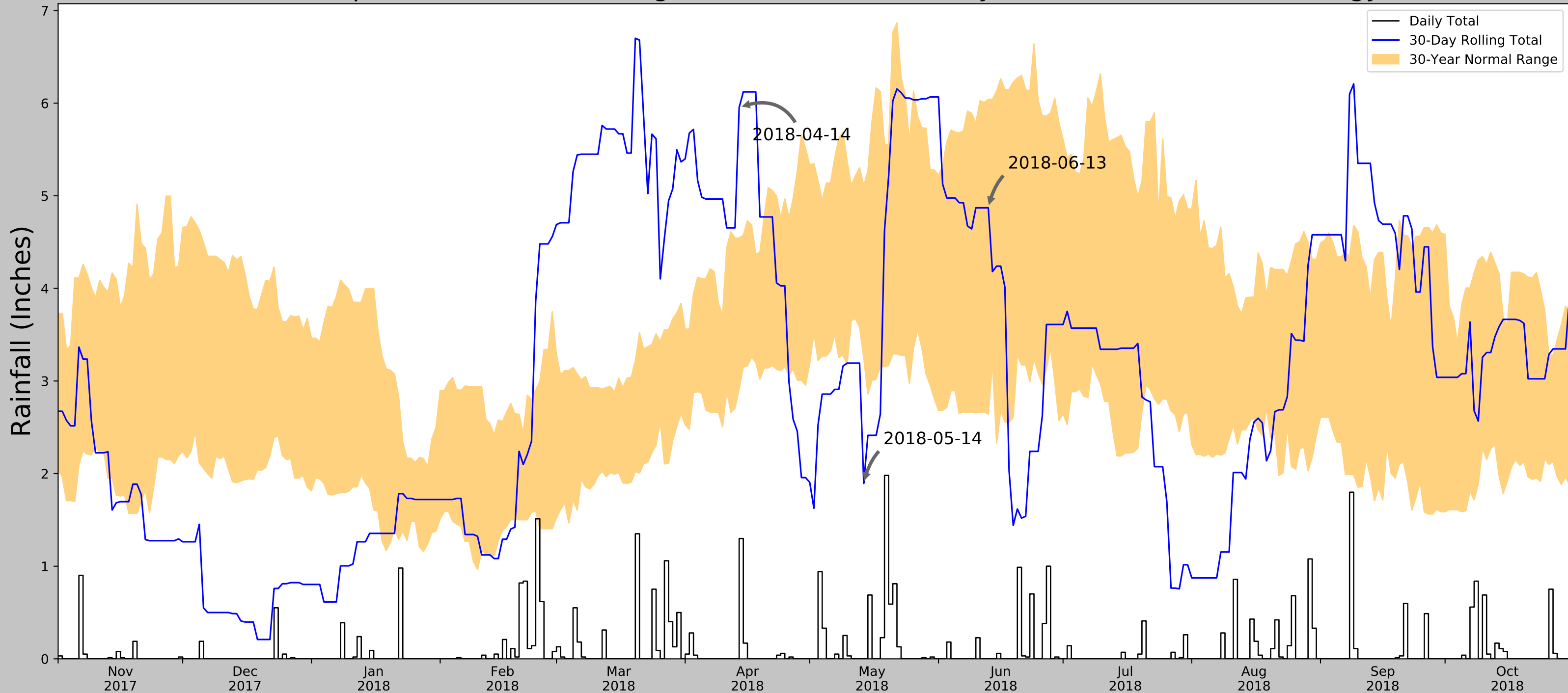
DATE
12/2018

DRAWN BY
BDG

CHECKED BY
KAM

FIGURE
4

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	38.7809, -90.7443
Observation Date	2018-06-13
Elevation (ft)	631.83
Drought Index (PDSI)	Mild drought
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2018-06-13	2.642913	6.041732	4.870079	Normal	2	3	6
2018-05-14	3.248425	5.110236	1.893701	Dry	1	2	2
2018-04-14	2.914567	4.543307	5.952756	Wet	3	1	3
Result							Normal Conditions - 11

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
WELDON SPRING NWS	38.6989, -90.6828	583.99	6.564	47.84	3.268	10469	90
ST PETERS 2 SSE	38.7556, -90.6106	554.134	7.412	77.696	3.911	755	0
ST LOUIS SPRT OF S L AP	38.6572, -90.6558	461.942	9.788	169.888	6.068	54	0
ST CHARLES ELM PT	38.8142, -90.5139	472.113	12.618	159.717	7.694	75	0