



**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): 9/22/2020
 ORM Number: LRB-2020-01290
 Associated JDs: N/A
 Review Area Location¹: State/Territory: Ohio City: Willoughby County/Parish/Borough: Lake
 Center Coordinates of Review Area: Latitude 41.617766 Longitude -81.437520

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
N/A.	N/A.	N/A.	N/A.

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.

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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D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
Wetland A	0.049 acre(s)	(b)(1) Non-adjacent wetland.	<p>The subject wetland has been determined to not be “adjacent” to a paragraph (a)(1), (2), or (3) water. Each adjacency criteria is assessed below:</p> <ul style="list-style-type: none"> ■ (i) The subject wetland does not abut a paragraph (a)(1), (2), or (3) water as evidenced by the submitted wetland delineation report and subsequent revision, a review of resources, as well as the 29JUL2017 site visit. The subject wetland persists in a slight depression on the landscape and is entirely surrounded by uplands on all sides. No (a)(1)-(3) waters were observed within the immediate vicinity of the perimeter of the subject wetland therefore, the subject wetland is not abutting a paragraph (a)(1)-(3) water. ■ (ii) No evidence of inundation by flooding from a paragraph (a)(1), (2), or (3) water was observed during the 29JUL2017 site visit. No potential (a)(1)-(3) waters were observed within the immediate vicinity of the subject wetland during the 29JUL020 site visit. Based on a review of mapping resources and aerial photographs, the nearest potential mapped (a)(1)-(3) waters are a stream 1000+ feet north of the subject parcel and a stream 1000+ feet south of the subject parcel. The downstream portion of ephemeral Stream 1 (off-site) may have intermittent flow and thereby be the closest tributary to the subject wetland however, based on topography (subject wetland is several feet higher in elevation than the downstream reach of the stream) and the small drainage area of Stream 1, flooding would not be expected to travel several feet upslope and inundate the subject wetland. The NRCS Web Sol survey indicates that the flood frequency class of the soils underlying the subject parcel is "None" meaning that flooding is not probable (the chance of flooding is nearly 0 percent in any year and flooding occurs less than once in 500 years). Additionally, the subject parcel is located

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
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 NAVIGABLE WATERS PROTECTION RULE**

Excluded waters ((b)(1) – (b)(12)): ⁴			
Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
			<p>in FEMA Flood Zone X, “Area of Minimal Flooding.” As no evidence of inundation by flooding was observed during the 29JUL2020 site visit and resources do not indicate the subject wetland is prone to being inundated by flooding from a paragraph (a)(1)-(3) water, the subject wetland has been determined to not meet adjacency criteria (ii).</p> <ul style="list-style-type: none"> ■ (iii) The subject wetland persists in a slight depression on the landscape and is entirely surrounded by uplands on all sides. As per the 29JUL2017 site visit, there were no natural berms, banks, dunes, or similar natural features around the perimeter of the subject wetland. The subject wetland is not separated from a paragraph (a)(1)-(3) water only by a natural berm, bank, dune, or similar natural feature and therefor does not meet adjacency criteria (iii). ■ (iv) The subject wetland persists in a slight depression on the landscape and is entirely surrounded by uplands on all sides. As per the 29JUL2017 site visit, there were no artificial dikes, barriers, or similar artificial structures observed around the perimeter of the subject wetland nor were there any artificial features (e.g. culverts) observed within or stemming from the subject wetland. The subject wetland is not separated from a paragraph (a)(1)-(3) water only by an artificial dike, barrier, or similar artificial structure and therefor does not meet adjacency criteria (iv).
Wetland B	0.189	acre(s)	<p>(b)(1) Non-adjacent wetland.</p> <p>The subject wetland has been determined to not be “adjacent” to a paragraph (a)(1), (2), or (3) water. Each adjacency criteria is assessed below:</p> <ul style="list-style-type: none"> ■ (i) The subject wetland does not abut a paragraph (a)(1), (2), or (3) water as evidenced by the submitted wetland delineation report and subsequent revision, a review of resources, as well as the 29JUL2017 site visit. The subject wetland persists in a slight depression on the landscape and is entirely surrounded by uplands on all sides which the exception of its outlet into non-jurisdictional ephemeral Stream 1. No (a)(1)-(3) waters were observed within the immediate vicinity of the perimeter of the subject wetland therefore, the subject wetland is not abutting a paragraph (a)(1)-(3) water.



**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
			<p>■ (ii) No evidence of inundation by flooding from a paragraph (a)(1), (2), or (3) water was observed during the 29JUL2017 site visit. No potential (a)(1)-(3) waters were observed within the immediate vicinity of the subject wetland during the 29JUL2020 site visit. Based on a review of mapping resources and aerial photographs, the nearest potential mapped (a)(1)-(3) waters are a stream 1000+ feet north of the subject parcel and a stream 1000+ feet south of the subject parcel. The downstream portion of ephemeral Stream 1 (off-site) may have intermittent flow and thereby be the closest tributary to the subject wetland however, based on topography (subject wetland is several feet higher in elevation than the downstream reach of the stream) and the small drainage area of Stream 1, flooding would not be expected to travel several feet upslope and inundate the subject wetland. The NRCS Web Sol survey indicates that the flood frequency class of the soils underlying the subject parcel is "None" meaning that flooding is not probable (the chance of flooding is nearly 0 percent in any year and flooding occurs less than once in 500 years). Additionally, the subject parcel is located in FEMA Flood Zone X, "Area of Minimal Flooding." As no evidence of inundation by flooding was observed during the 29JUL2020 site visit and resources do not indicate the subject wetland is prone to being inundated by flooding from a paragraph (a)(1)-(3) water, the subject wetland has been determined to not meet adjacency criteria (ii).</p> <p>■ (iii) The subject wetland persists in a slight depression on the landscape and is entirely surrounded by uplands on all sides with the exception of its outlet to non-jurisdictional ephemeral Stream 1. As per the 29JUL2017 site visit, there were no natural berms, banks, dunes, or similar natural features around the perimeter of the subject wetland. The subject wetland is not separated from a paragraph (a)(1)-(3) water only by a natural berm, bank, dune, or similar natural feature and therefore does not meet adjacency criteria (iii).</p> <p>■ (iv) The subject wetland persists in a slight depression on the landscape and is entirely</p>



**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
				surrounded by uplands on all sides with the exception of its outlet to non-jurisdictional ephemeral Stream 1. As per the 29JUL2017 site visit, there were no artificial dikes, barriers, or similar artificial structures observed around the perimeter of the subject wetland nor were there any artificial features (e.g. culverts) observed within or stemming from the subject wetland. The subject wetland is not separated from a paragraph (a)(1)-(3) water only by an artificial dike, barrier, or similar artificial structure and therefor does not meet adjacency criteria (iv).
Wetland C	0.027	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland D	0.031	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland E/F	0.154	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland G	0.009	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland H/I	0.148	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland J	0.046	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland K	0.144	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland L	0.008	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland M	0.003	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland N	0.006	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland O	0.009	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland P	0.012	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Wetland Q	0.004	acre(s)	(b)(1) Non-adjacent wetland.	See rationale for Wetland A.
Stream 1	76	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Stream 1 is a shallow, narrow channel that extends north from the northern tip of Wetland B. The substrate in Stream 1 is mostly silt with some gravel. Stream 1 was not flowing during the 29JUL2017 site visit and a photo dated 12OCT2016 also does show any flow. Stream 1 is not depicted on USGS topographic maps, USGS NHD datasets, USFWS NWI maps, the USEPA Waters Geoviewer, or the NRCS Web



**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
			Soil Survey. Stream 1 is depicted on USGS Stream Stats maps and Stream 1 does correspond to a topographic crenulation on the LakeNavigator 3.0 2016 2-foot contour layer which continues north off-site. Based on USGS Stream Stats, the drainage area of Stream 1 is less than 0.2 square miles. The results of the APT indicate that lack of flow in the channel was present during overall normal conditions (29JUL2017 site visit and 12OCT2016 photograph) but also during the wet season (12OCT2016 photograph) when flow would be expected in the channel, and during a period following a wet month. Available evidence indicates that Stream 1 is ephemeral and is therefore excluded pursuant to paragraph (b)(3).

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: [22NOV2016 Wetland Delineneation Report submitted by BL Companies and 3JAN2017 revisions \(contained in Response to Comments and Additional Information Requeded\) submitted by BL Companies](#)

This information is sufficient for purposes of this AJD.

Rationale: [N/A](#)

- Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\)](#).
- Photographs: [Aerial and Other: Lake County LakeNavigator 3.0 \(2007, 2011, and 2014 Orthophotos\) accessed 18SEP2020, https://arcgis.lakecountyohio.gov/lakenavigator3/?find; Google Earth Aerial Photos \(6APR2012, 14MAY2017, 6JUL2018, 17SEP2019\); Photos dated 12OCT2016 contained in 22NOV2016 Wetland Delineneation Report submitted by BL Companies](#)
- Corps site visit(s) conducted on: [29JUL2017](#)
- Previous Jurisdictional Determinations (AJDs or PJDs): [PJD LRB-2016-00901 dated 12APR2017](#)
- Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- USDA NRCS Soil Survey: [NRCS Web Soil Survey accessed 18SEP2020, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx](#)
- USFWS NWI maps: [USFWS National Wetlands Inventory Surface Waters and Wetlands accessed 18SEP2020, https://www.fws.gov/wetlands/data/mapper.html](#)
- USGS topographic maps: [USGS Historical Topographic Map Explorer \(Mayfield Heights 1970, 1980, and 1995\) accessed 18SEP2020, https://livingatlas.arcgis.com/topoexplorer/index.html; Historic Aerials \(Willoughby 2016\) accessed 18SEP2020, historicaerials.com](#)

Other data sources used to aid in this determination:



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

Data Source (select)	Name and/or date and other relevant information
USGS Hydrologic Atlas	USGS The National Map accessed 18SEP2020, https://viewer.nationalmap.gov/advanced-viewer/
USDA Sources	N/A.
NOAA Sources	N/A.
CorpsMap ORM Map Layers	Regulatory ORM Project Locations and ORAM Aquatic Resources accessed 18SEP2020
Other state/local data (specify)	Lake County LakeNavigator 3.0 (2016 2' contours) accessed 18SEP2020, https://arcgis.lakecountyohio.gov/lakenavigator3/?find
FEMA/FIRM maps	FEMA's National Flood Hazard Layer (NFHL) Viewer accessed 18SEP2020, https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html
USGS Stream stats	USGS Stream Stats accessed 18SEP2020, https://streamstats.usgs.gov/ss/
EPA sources (specify)	USEPA WATERS GeoViewer accessed 18SEP2020, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=ada349b90c26496ea52aab66a092593b

B. Typical year assessment(s): The Corps Antecedent Precipitation Tool was used to complete typical year assessments. The APT pulls precipitation data from NOAA's Daily Global Historical Climatology Network. The APT evaluates normal precipitation conditions based on the three 30-day periods preceding the observation date. For each period, a weighted condition value is assigned by determining whether the 30-day precipitation total falls within, above, or below the 70th and 30th percentiles for totals from the same date range over the preceding 30 years. The APT then makes a determination of "normal," "wetter than normal," or "drier than normal" based on the condition value sum. The APT also displays results generated via the Palmer Drought Severity Index (PDSI) and the University of Delaware WebWIMP. The latitude/longitude for the subject parcel was input into the APT and "single" point was chosen for the geographic area. Results are below:

- Corps Site Visit Date 29JUL2017 (PDSI Class: Normal, Season: Dry Season, ARC Score: 11, Antecedent Precip Condition: Normal Conditions)

Conclusion: Overall, this period is considered to fall within normal climatic conditions. The Palmer Drought severity Index indicates this period was normal while the WebWIMP indicates this period fell within the dry season. The date of the site visit followed a period of being above the 30-year normal range.

- Delineation Report Photograph Date 12OCT2016 (PDSI Class: Incipient wetness, Season: Wet Season, ARC Score: 14, Antecedent Precip Condition: Normal Conditions)

Conclusion: Overall, this period is considered to fall within normal climatic conditions however, the Palmer Drought Severity Index indicates incipient wetness during this period, the WebWIMP indicates this period fell within the wet season, and the 30-days preceding the date of the photograph were "wet" (above 30-year normal range for the majority of the month).

- Google Earth Photo Date 6APR2012 (PDSI Class: Mild Drought, Season: Wet Season, ARC Score: 13, Antecedent Precip Condition: Normal Conditions)

Conclusion: Overall, this period is considered to fall within normal climatic conditions however, the Palmer Drought Severity Index indicates mild drought during this period, and the WebWIMP indicates this period fell within the wet season.

C. Additional comments to support AJD:

- The NRCS Web Soil Survey indicates that flooding frequency for the entire site is "None" meaning that flooding is not probable (the chance of flooding is nearly 0 percent in any year and flooding occurs less than once in 500 years).



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

- USGS Stream Stats identifies two streams flowing north through the site (interpolated stream-grid lines) however, the 2017 site visit confirmed that there is only one short ephemeral stream on the site.
- The USGS quadrangle identifies the closest stream to the site (greater than 1,000 feet from northern site boundary) as an intermittent stream which flows northwest then west to Lake Erie.
- USEPA WATERS GeoViewer, the USGS National Map NHD Dataset, and the USFWS NWI Mapper identifies the closest streams to the site as a stream 1000+ feet north of the subject parcel and a stream 1000+ feet south of the subject parcel.
- The FEMA Flood Hazard later identifies the subject parcel as Zone X (area of minimal flood hazard).
- No flow was observed in stream was during the 29JUL2017 site visit nor was there any flow visible in the photograph (taken 12OCT2016) provided by the consultant.
- Lake Navigator 3.0 does not identify any streams within the subject parcel. The 2 foot contour layer identifies the site as sloping generally in a north/northwest direction. Towards the northwest portion of the site, topographic crenulations persist much in the same location as the on-site ephemeral stream. The 2014 Orthophoto layer shows the ephemeral stream extending off-site to the north and continuing north under a drive via a culvert.
- As the subject parcel is under tree cover, no evidence as to presence or absence of flow within Stream 1 could be obtained. In aerial photos with leaf-off conditions (Google Earth 4/6/2012; Lake Navigator 2007, 2011, and 2014 Orthophotos), the presence of the stream channel is visible as well as its extension off-site to the north. No inundation was visible within the subject parcel in any of the aerial photographs with leaf-off conditions.