# APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

## **SECTION I: BACKGROUND INFORMATION**

A.	REPORT COMPLETION DATE FOR	APPROVED JURISDICTIONAL	L DETERMINATION (JD): April 25, 2022
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В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: Pittsburgh District, Poland Preserve, LRP-2022-62
C.	PROJECT LOCATION AND BACKGROUND INFORMATION:  State: Ohio County/parish/borough: Mahoning City: Poland Center coordinates of site (lat/long in degree decimal format): Lat. 40.989773° N, Long80.610791° W.  Universal Transverse Mercator: 532738.167496 X, 4537694.704951 Y, Zone 17  Name of nearest waterbody: Yellow Creek (~0.25mi)  Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Mahoning River  Name of watershed or Hydrologic Unit Code (HUC): HUC8: 05030103; HUC12: 050301030806  ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.  ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  ☐ Office (Desk) Determination. Date: March 25, 2022 ☐ Field Determination. Date(s): March 10, 2022
SE A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required]  Waters subject to the ebb and flow of the tide.  Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:  CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere are and are not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S.  a. Indicate presence of waters of U.S. in review area (check all that apply):   TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs  Non-RPWs that flow directly or indirectly into TNWs  Wetlands directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs  Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:  Non-wetland waters: linear feet: width (ft) and/or acres.  Wetlands: 0.08 acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
	2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup> ☑ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Within the review area, Wetlands W1, W2, W4a, W4b, W5, and W6 are hydrologically isolated and do not display a direct surface connection to other waters (a shallow subsurface connection is not suspected). There is no information available to show that any of the above waters 1) are or could be used in interstate commerce; 2) produce fish or shellfish which are or could be taken and sold in interstate or foreign commerce, or 3) are or could be used for

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>&</sup>lt;sup>3</sup> Supporting documentation is presented in Section III.F.

industrial purposes by industries in interstate commerce. W1, W2, W4a, W4b, W5, and W6 are therefore isolated and are not jurisdictional.

Reference is made to 33 CFR 328.3(b)(10), which states that "Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off" are not Waters of the United States. Basin B1 was constructed in upland for stormwater detention, and is not an impoundment of jurisdictional waters. Therefore, B1 is not jurisdictional.

## **SECTION III: CWA ANALYSIS**

## A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW Identify TNW:	
	Summarize rationale supporting determination: .	
2.	Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":	

## B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

## 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

# Watershed size: 20.17 square miles Drainage area: 20.9 Pick List Average annual rainfall: 35.5 inches Average annual snowfall: 43 inches (ii) Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. ☐ Tributary flows through 2 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 5-10 aerial (straight) miles from TNW.
Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: No; the project is entirely within the State of Ohio.

Identify flow route to TNW<sup>5</sup>: Yellow Creek flows generally north into Lake Hamilton, then outlets and flows generally northeast to the Mahoning River, a TNW.

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

		Tributary stream order, if known: 3 <sup>rd</sup>
	(b)	General Tributary Characteristics (check all that apply):  Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
		<b>Tributary</b> properties with respect to top of bank (estimate):  Average width: 30 feet  Average depth: 5 feet  Average side slopes: <b>2:1.</b>
		Primary tributary substrate composition (check all that apply):  Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Appears relatively stable from aerial
imagery.		Presence of run/riffle/pool complexes. Explain: not known. Tributary geometry: <b>Meandering</b> Tributary gradient (approximate average slope): 0.1 %
	(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Yellow Creek flows perennially. Other information on duration and volume: ~8cfs harmonic mean flow according to USGS StreamStats.
		Surface flow is: <b>Discrete and confined.</b> Characteristics: within a relatively incised channel.
		Subsurface flow: <b>Unknown</b> . Explain findings:
		Tributary has (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):  clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wack line sediment sorting sediment down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining abrupt change in plant community other (list):  Discontinuous OHWM. <sup>7</sup> Explain:
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):    High Tide Line indicated by:
(iii)		emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Yellow Creek could not be directly observed from the site, but a review of available information indicates that the Yellow Creek watershed is impaired for human use. No evidence of pollutants was observed during the site visit.

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

Identify specific pollutants, if known:

(iv) Bio	logical Characteristics. Channel supports (check all that apply):
to Google Ear	Riparian corridor. Characteristics (type, average width): The riparian corridor extends approximately 350 feet according th, and appears dominated by emergent vegetation with few trees in the floodplain at this location.  We then defined a Characteristics of the riparian corridor is developed to PEM westend.
	Wetland fringe. Characteristics: A large portion of the riparian corridor is devoted to PEM wetland. Habitat for:
	Federally Listed species. Explain findings: .
	Fish/spawn areas. Explain findings:
	Other environmentally-sensitive species. Explain findings:
	Aquatic/wildlife diversity. Explain findings:
2. Charact	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Phy	vsical Characteristics:
(a)	General Wetland Characteristics:
	Properties:
	Wetland size: 0.08 acres Wetland type. Explain: PEM - Palustrine, Emergent.
	Wetland quality. Explain: Moderate. This wetland scored 46 on ORAM, which is Category 2, and is dominated by
reed canarygr	
	Project wetlands cross or serve as state boundaries. Explain: No; entirely intrastate waters.
(b)	General Flow Relationship with Non-TNW:
(6)	Flow is: <b>Perennial flow</b> . Explain: Wetland W3 is part of a larger wetland that directly abuts Yellow Creek, and flows on
a perennial ba	
	Surface flow is: <b>Discrete and confined</b> Characteristics: W3 directly abuts Yellow Creek, but there is also a small channel signature on Google Earth that
drains from th	the review area to Yellow Creek entirely surrounded by the offsite portion of W3.
	Subsurface flow: <b>Unknown</b> . Explain findings: Not investigated.  Dye (or other) test performed:
(c)	Wetland Adjacency Determination with Non-TNW:
( )	☐ Directly abutting
	☐ Not directly abutting
	Discrete wetland hydrologic connection. Explain:
	Ecological connection. Explain:
	Separated by berm/barrier. Explain:
(d)	Proximity (Relationship) to TNW
	Project wetlands are 5-10 river miles from TNW.
	Project waters are 5-10 aerial (straight) miles from TNW.
	Flow is from: Wetland to navigable waters.
	Estimate approximate location of wetland as within the 50 - 100-year floodplain.
(ii) Che	emical Characteristics:
Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
	characteristics; etc.). Explain: W3 displayed some leaf staining in open water areas during the site visit, but generally
	appeared of good quality. As noted above, the Yellow Creek watershed is listed as impaired for human use.
Idei	ntify specific pollutants, if known:
(iii) Bio	logical Characteristics. Wetland supports (check all that apply):
$\boxtimes$	Riparian buffer. Characteristics (type, average width): As noted above, Yellow Creek's riparian corridor is about 350 feet
K-7	most entirely emergent wetland.
	Vegetation type/percent cover. Explain: 90% phalaris, 10% woolgrass in the herb stratum.
Ц	Habitat for:  Federally Listed species. Explain findings:
	Fish/spawn areas. Explain findings:  Fish/spawn areas. Explain findings:
	Other environmentally-sensitive species. Explain findings:
	Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)
All wetland(s) being considered in the cumulative analysis: 1
Approximately (0.08) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
W3 Y	0.08		

Summarize overall biological, chemical and physical functions being performed: W3 is providing typical ecosystem services such as flood attenuation and habitat diversity. While not reducing the flow of pollutants into the TNW, it is not contributing pollutants either.

## C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

# D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
	TNWs: linear feet width (ft), Or, acres.
	Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.
	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that
	tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs.  Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  □ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  □ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Google Earth shows that the delineated portion of W3 is an extension of a larger wetland that directly abuts the OHWM of Yellow Creek. W3 therefore directly abuts Yellow Creek.  □ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly
abutting an RPW:  Provide acreage estimates for jurisdictional wetlands in the review area: 0.08 acres.
Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
Provide acreage estimates for jurisdictional wetlands in the review area: acres.
Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.  Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
Provide estimates for jurisdictional wetlands in the review area: acres.
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.  Demonstrate that impoundment was created from "waters of the U.S.," or  Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  Demonstrate that water is isolated with a nexus to commerce (see E below).
DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10
which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain:
(

E.

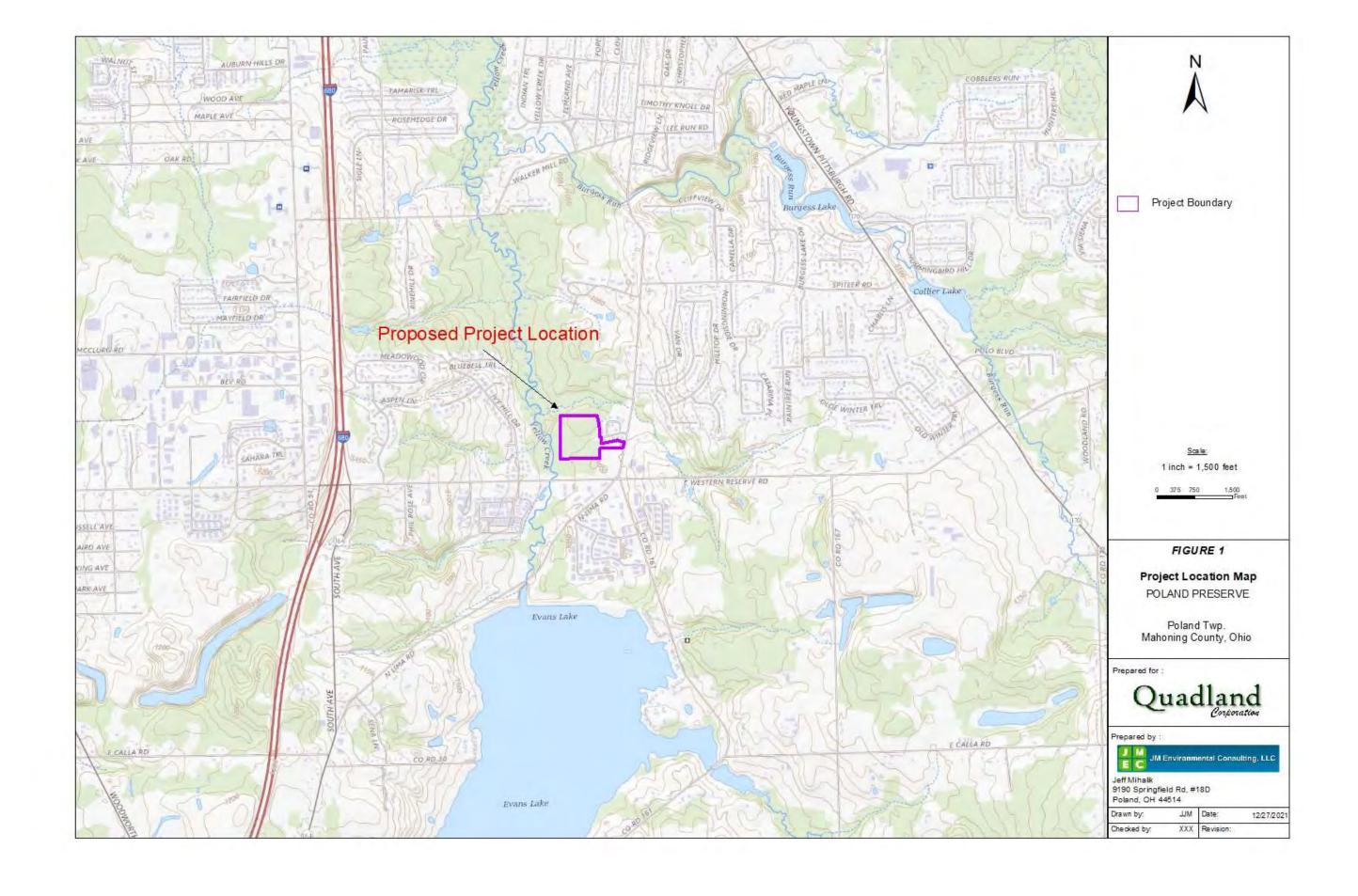
<sup>\*</sup>See Footnote # 3.

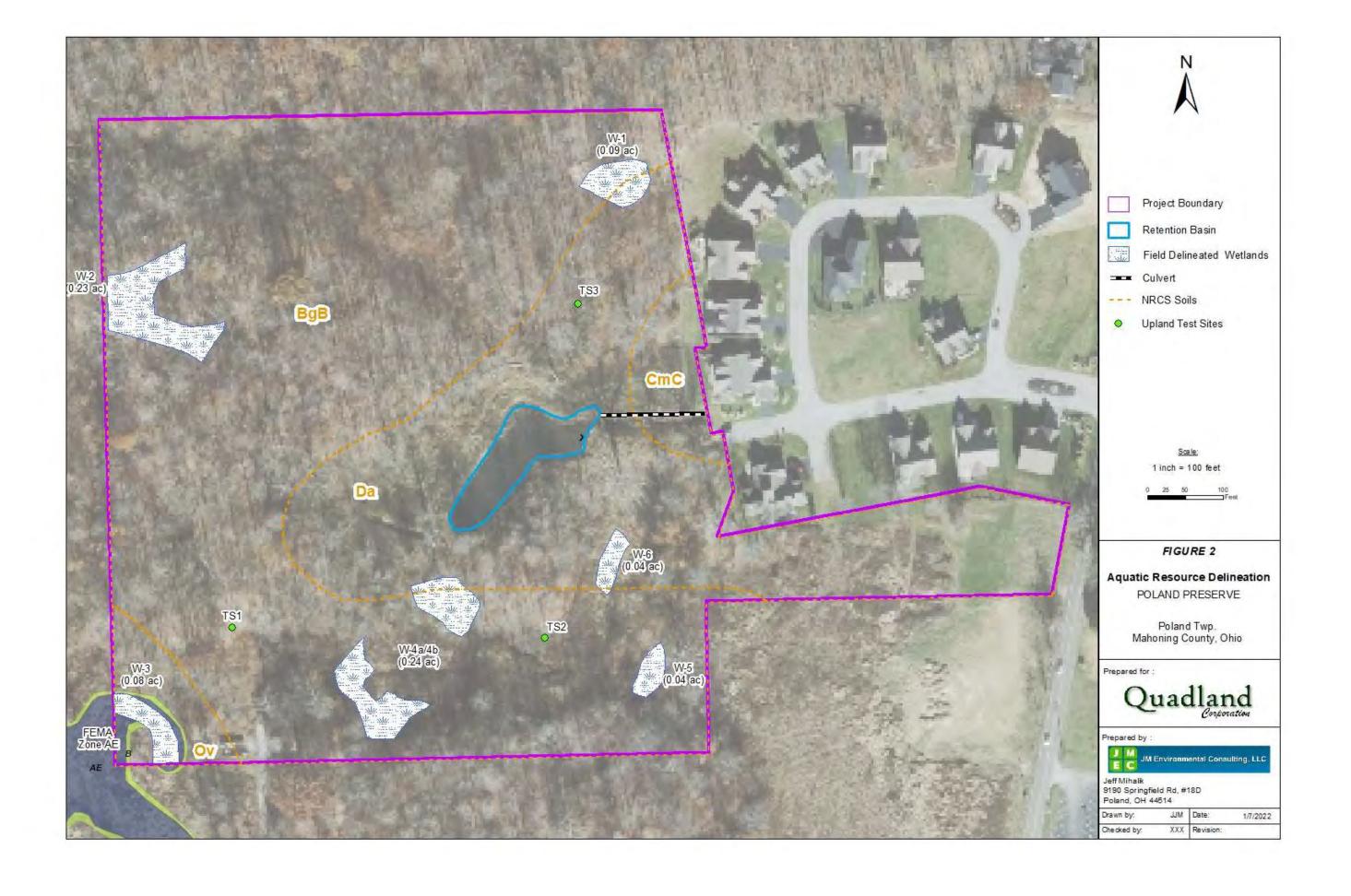
9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

10 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

	Other factors. Explain: .				
	Identify water body and summarize rationale supporting determination:				
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters:  Wetlands: acres.				
F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):  ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineer Wetland Delineation Manual and/or appropriate Regional Supplements.  ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.  ☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely of "Migratory Bird Rule" (MBR).  ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:  ☐ Other: (explain, if not covered above):					
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource: .  Wetlands: acres.				
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: acres.				
	CTION IV: DATA SOURCES.  SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):				
	<ul> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Fig. 1, Site Location Map; and Fig.2, Existing Conditions Map, "Poland Preserve 2022 Final Wetland Delineation Report," JM Environmental Consulting LLC, 10 March 2022.</li> <li>Data sheets prepared/submitted by or on behalf of the applicant/consultant.</li> <li>☑ Office concurs with data sheets/delineation report.</li> <li>☐ Office does not concur with data sheets/delineation report.</li> </ul>				
	<ul> <li>□ Data sheets prepared by the Corps:</li> <li>□ Corps navigable waters' study:</li> <li>□ U.S. Geological Survey Hydrologic Atlas:</li> <li>□ USGS NHD data.</li> <li>□ USGS 8 and 12 digit HUC maps.</li> </ul>				
	<ul> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name:1:24,000 - New Middletown.</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation:</li> <li>National wetlands inventory map(s). Cite name:</li> <li>State/Local wetland inventory map(s):</li> <li>FEMA/FIRM maps:FIRMETTE panel (in file).</li> <li>100-year Floodplain Elevation is:1030 ft(National Geodectic Vertical Datum of 1929)</li> <li>Photographs:  Aerial (Name &amp; Date):Google Earth, 1985-2019.</li> <li>or  Other (Name &amp; Date):Site photographs by Corps and consultant.</li> </ul>				
	Previous determination(s). File no. and date of response letter:  Applicable/supporting case law:Rapanos v. US; Carabell v. US.  Applicable/supporting scientific literature:  Other information (please specify):				

<b>B.</b> .	ADDITIONAL	COMMENTS	TO SUPPORT J	I <b>D:</b> .
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# National Flood Hazard Layer FIRMette

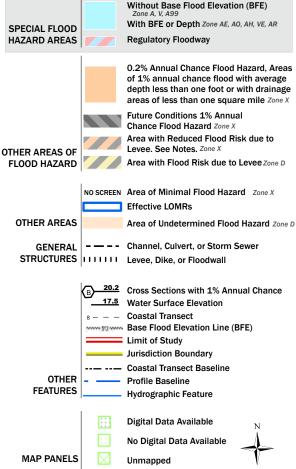


Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The pin displayed on the map is an approximate point selected by the user and does not represent

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/24/2022 at 2:22 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.