

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 DETERMINATION (JD): June 6, 2014

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRB, 528 Joint Venture LLC, DA No. 2013-01344, Stream 1, Wetland A, Wetland B, Wetland C, and Wetland D; Form 1 of 4

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Ohio County/parish/borough: Geauga City: Middlefield
Center coordinates of site (lat/long in degree decimal format): Lat. 41.4542 °, Long. -81.0589 °
Universal Transverse Mercator: 5T

Name of nearest waterbody: Tare Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Cuyahoga River
Name of watershed or Hydrologic Unit Code (HUC): 04110002

- 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: 5T
- Field Determination. Date(s): April 24, 2014, 5T

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no “*navigable waters of the U.S.*” within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review 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: 5T

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are “*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):¹

- 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: 643 linear feet: 5 width (ft) and/or 5T acres.
Wetlands: 0.62 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): 5T

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: 7T

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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).

³ Supporting documentation is presented in Section III.F.

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: 7T

Summarize rationale supporting determination: 5T

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": 5T

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 waterbody⁴ 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: 0.15 square miles

Drainage area: 809 square miles

Average annual rainfall: 47.28 inches

Average annual snowfall: 97.1 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 4 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 2-5 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: 5T

Identify flow route to TNW⁵: Stream 1 flows west into Stream 2. Stream flows south then west/northwest into Tare Creek.

Tare Creek flows west into the East Branch Cuyahoga River and then into the main stem Cuyahoga River which is designated as a TNW further downstream.

Tributary stream order, if known: 5T

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural

Artificial (man-made). Explain: 5T

Manipulated (man-altered). Explain: 5T

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ 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 properties with respect to top of bank (estimate):

Average width: 5 feet
Average depth: <1 foot
Average side slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

- | | | |
|---|---|-----------------------------------|
| <input checked="" type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: 5T | |
| <input type="checkbox"/> Other. Explain: 5T | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Relatively stable

Presence of run/riffle/pool complexes. Explain: 5T

Tributary geometry: Meandering

Tributary gradient (approximate average slope): 5T%

(c) **Flow:**

Tributary provides for: Ephemeral Flow

Estimate average number of flow events in review area/year: 6-10

Describe flow regime: 5T

Other information on duration and volume: 5T

Surface flow is: Discrete and Confined Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

Tributary has (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input checked="" type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input checked="" type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input checked="" type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input checked="" type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community 5T |
| <input type="checkbox"/> other (list): 5T | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: 5T | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): 5T | |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: 5T

Identify specific pollutants, if known: 5T

⁶A 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.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- Riparian corridor. Characteristics (type, average width): The entire stream is buffered by forested habitat for at least 100 feet on each side.
- Wetland fringe. Characteristics: The downstream portion of Stream 1 flows through Wetland D and into Wetland E.
- Habitat for:
 - Federally Listed species. Explain findings: 5T
 - Fish/spawn areas. Explain findings: 5T
 - Other environmentally-sensitive species. Explain findings: 5T
 - Aquatic/wildlife diversity. Explain findings: 5T

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: Wetland A is 0.293 acre, Wetland B is 0.016 acre, Wetland C is 0.116 acre, and Wetland D is 0.195 acre

Wetland type. Explain: Forested

Wetland quality. Explain: Moderate

Project wetlands cross or serve as state boundaries. Explain: 5T

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent Flow Explain: Wetlands A, C, and D abut the stream and flow into the stream on an intermittent basis. Wetland B overland sheetflows into the stream intermittently.

Surface flow is: Discrete and Confined

Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: Wetland B overland sheet flows into Stream 1.

Ecological connection. Explain: 5T

Separated by berm/barrier. Explain: 5T

(d) Proximity (Relationship) to TNW

Project wetlands are 30 (or more) river miles from TNW.

Project waters are 25-30 aerial (straight) miles from TNW.

Flow is from: Wetland to Navigable Waters

Estimate approximate location of wetland as within the 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No standing water was observed during the site visit

Identify specific pollutants, if known: 5T

(iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width): Wetlands A, B, C, and D were located along Stream 1 within a corridor that included at least a 100-foot wide forested buffer on each side of the stream.
- Vegetation type/percent cover. Explain: 100% forested
- Habitat for:
 - Federally Listed species. Explain findings: 5T
 - Fish/spawn areas. Explain findings: 5T
 - Other environmentally-sensitive species. Explain findings: 5T
 - Aquatic/wildlife diversity. Explain findings: Wetlands A, B, C, and D provide habitat for amphibians and macroinvertebrates.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 4

Approximately (0.62) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland A	Yes	0.293	5T	5T
Wetland B	No	0.016	5T	5T
Wetland C	Yes	0.116	5T	5T
Wetland D	Yes	0.195	5T	5T

Summarize overall biological, chemical and physical functions being performed: These wetlands provide the following functions and services: hydrologic flux and storage including floodwater and runoff attenuation and release; sediment and nutrient transport and retention; pollutant attenuation and release; biogeochemical cycling and storage; stream channel stability via serving as a natural buffer; biological productivity of micro/macro flora and fauna, decomposition, and community structure; and wildlife support including providing habitat.

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: 5T
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: Wetland B flows overland into Stream 1. Wetlands A, C, and D directly abut Stream 1. Stream 1 flows west through Wetland E, connects to Stream 2 which flows south and then west off-site before connecting to Tare Creek, and then the East Branch Cuyahoga River, which the main stem Cuyahoga River becomes a TNW further downstream.

The stream and its adjacent wetlands have hydrologic connectivity to the Cuyahoga River, thereby providing a significant nexus between the stream and its adjacent wetlands and the downstream TNW. Hydrologic connectivity refers to the flow that transports organic matter and nutrients, energy, and aquatic organisms throughout the system (Freeman et al., 2006). Stream 1 influences the chemistry and physical conditions of the downstream TNW through its hydrologic input, storage, and transport of sediments and energy. Rainfall, snowmelt, and stormwater runoff within the drainage area of Stream 1 provides hydrology to the downstream receiving waters. The stream contributes to the chemical and physical make-up of the Cuyahoga River through its ability to convey sediments, chemicals, nutrients, and contaminants downstream to the Cuyahoga River. The subject wetlands directly affect the nature of the water entering Stream 1 and its downstream receiving waters, both in quantity and chemical/physical attributes. This occurs through the reduction of runoff rates of water received by Stream 1 resulting from attenuation and storage of floodwaters; capture of water through evapotranspiration; storage of runoff; and filtering and/or storage of nutrients, chemicals, and sediments contained in rainfall, runoff, or other hydrologic inputs. Ultimately, this affects the downstream TNW as the wetlands alter the amount of flow reaching the TNW and furthermore, any additional matter such as nutrients, chemicals, sediments, and pollutants carried in that flow.

The Cuyahoga River Watershed has impairments including increasing urbanization bringing impervious surfaces, construction at headwaters reducing stream function, increased erosion, sediment which impairs aquatic life and widens flood areas, habitat loss, and loss of wetlands (Cuyahoga River Community Planning Organization). Since the wetlands and stream are located in close proximity to commercial developments, a major roadway, and agricultural fields and they receive a majority of their hydrology from runoff associated with the adjacent development and agricultural fields, they provide an important function of reducing the effects of runoff and storm sewer impacts on the downstream TNW. The stream conveys water that has been filtered from the wetlands to the downstream TNW. Combined, the wetlands and stream supply the downstream TNW with a cleaner source of water that will aid in reducing impairments.

Due to the physical, biological, and chemical connectivity of Stream 1 and its adjacent wetlands as described above, it has been determined that Stream 1 and its adjacent wetlands have a significant nexus with the downstream TNW, the Cuyahoga River as the functions and services provided by the stream and its adjacent wetlands provide more than a speculative effect on the physical integrity of the Cuyahoga River.

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: 5T

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: 5T linear feet 5T width (ft), Or, 5T acres.
 Wetlands adjacent to TNWs: 5T 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: 5T.
 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: 5T.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 7T linear feet 7T width (ft).
 Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T

3. Non-RPWs⁸ 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: 643 linear feet 5 width (ft).
 Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T

4. 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: 5T
 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: 7T

Provide acreage estimates for jurisdictional wetlands in the review area: 7T acres.

5. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 5T acres.

6. 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: 0.62 acres.

7. Impoundments of jurisdictional waters.⁹

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).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH 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: 5T
 Other factors. Explain: 5T

Identify water body and summarize rationale supporting determination: 5T

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 7T linear feet 7T width (ft).
 Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T
 Wetlands: 7T acres.

⁸See Footnote # 3.

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

¹⁰Prior 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.

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 Engineers 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 on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: 7T
- Other: (explain, if not covered above): 7T

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole 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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: 7T 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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: 7T acres.

SECTION IV: DATA SOURCES.

A. 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):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: 7T
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: 7T
- Corps navigable waters' study: 7T
- U.S. Geological Survey Hydrologic Atlas: 7T
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 7.5 Minute Middlefield
- USDA Natural Resources Conservation Service Soil Survey. Citation: Geauga County
- National wetlands inventory map(s). Cite name: 7.5 Minute Middlefield
- State/Local wetland inventory map(s): 7T
- FEMA/FIRM maps: 7T
- 100-year Floodplain Elevation is: 7T (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Googlemaps (ORM2), bing.com
 - or Other (Name & Date): 7T
- Previous determination(s). File no. and date of response letter: 7T
- Applicable/supporting case law: 7T
- Applicable/supporting scientific literature: 7T
- Other information (please specify): 7T

B. ADDITIONAL COMMENTS TO SUPPORT JD: 7T

Peter J. Krakowiak
Project Manager

July 16, 2014
Date

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U.S. Army Corps of Engineers

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Universal Transverse Mercator: 5T

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- 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: 5T

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- 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: 932 linear feet: 3 width (ft) and/or 5T acres.
Wetlands: 12.778 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): 5T

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: 7T

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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).

³ Supporting documentation is presented in Section III.F.

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: 7T

Summarize rationale supporting determination: 5T

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": 5T

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 waterbody⁴ 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: square miles

Drainage area: 809 square miles

Average annual rainfall: 47.28 inches

Average annual snowfall: 97.1 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 20-25 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: 5T

Identify flow route to TNW⁵: Stream 2 flows south then west/northwest into Tare Creek. Tar Creek flows west into the East Branch Cuyahoga River that connects to the main stem of the Cuyahoga River, which is designated as a TNW further downstream.

Tributary stream order, if known: 5T

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural

Artificial (man-made). Explain: 5T

Manipulated (man-altered). Explain: 5T

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ 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 properties with respect to top of bank (estimate):

Average width: 3 feet
Average depth: <1 foot
Average side slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

- | | | |
|---|---|-----------------------------------|
| <input checked="" type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input checked="" type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: 5T | |
| <input type="checkbox"/> Other. Explain: 5T | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Relatively stable

Presence of run/riffle/pool complexes. Explain: 5T

Tributary geometry: Meandering

Tributary gradient (approximate average slope): 5T%

(c) Flow:

Tributary provides for: Seasonal Flow

Estimate average number of flow events in review area/year: 11-20

Describe flow regime: 5T

Other information on duration and volume: 5T

Surface flow is: Discrete and Confined Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

Tributary has (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input checked="" type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input checked="" type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input checked="" type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input checked="" type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community 5T |
| <input type="checkbox"/> other (list): 5T | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: 5T | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): 5T | |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Water color was clear at the time of the site visit

Identify specific pollutants, if known: 5T

⁶A 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.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- Riparian corridor. Characteristics (type, average width): The stream is buffered by forested habitat for at least 100 feet on the east side. There is a smaller buffer on the west but it is limited due to the presence of a bike and buggy trail.
- Wetland fringe. Characteristics: The majority of Stream 2 flows through Wetland E.
- Habitat for:
 - Federally Listed species. Explain findings: 5T
 - Fish/spawn areas. Explain findings: 5T
 - Other environmentally-sensitive species. Explain findings: 5T
 - Aquatic/wildlife diversity. Explain findings: Stream 2 provides habitat for macroinvertebrates

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: Wetland E is 12.778 (on-site)

Wetland type. Explain: Forested

Wetland quality. Explain: Moderate to high

Project wetlands cross or serve as state boundaries. Explain: 5T

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent Flow Explain: Wetland E directly abuts Stream 2 and flows into it on an intermittent basis.

Surface flow is: Discrete and Confined

Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain: 5T

Separated by berm/barrier. Explain: 5T

(d) Proximity (Relationship) to TNW

Project wetlands are 30 (or more) river miles from TNW.

Project waters are 25-30 aerial (straight) miles from TNW.

Flow is from: Wetland to Navigable Waters

Estimate approximate location of wetland as within the 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No standing water was observed during the site visit

Identify specific pollutants, if known: 5T

(iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width): Wetland E is located along Stream 2 within a corridor that included at least a 100-foot wide buffer on the east side of the stream and a narrower buffer on the west.
- Vegetation type/percent cover. Explain: Combination of forested, scrub-shrub, and emergent
- Habitat for:
 - Federally Listed species. Explain findings: 5T
 - Fish/spawn areas. Explain findings: 5T
 - Other environmentally-sensitive species. Explain findings: 5T
 - Aquatic/wildlife diversity. Explain findings: Wetland E provides habitat for amphibians and macroinvertebrates.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 1

Approximately (12.778) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland E	Yes 5T	12.778 5T	5T	5T

Summarize overall biological, chemical and physical functions being performed: The wetland provides the following functions and services: hydrologic flux and storage including floodwater and runoff attenuation and release; sediment and nutrient transport and retention; pollutant attenuation and release; biogeochemical cycling and storage; stream channel stability via serving as a natural buffer; biological productivity of micro/macro flora and fauna, decomposition, and community structure; and wildlife support including providing habitat.

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: 5T
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: 5T

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: 5T linear feet 5T width (ft), Or, 5T acres.
 - Wetlands adjacent to TNWs: 5T 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: 5T.
 - 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: Stream 2 had flow during the site visit, during the delineation site visit, and is visible on aerial photography.

Provide estimates for jurisdictional waters in the review area (check all that apply):

 - Tributary waters: 932 linear feet 3 width (ft).
 - Other non-wetland waters: 7T acres.

Identify type(s) of waters: 7T

3. Non-RPWs⁸ 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: 7T acres.
Identify type(s) of waters: 7T

4. 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: 5T
- 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: Stream 2 flows directly through Wetland E and there is no disconnect between the two features.

Provide acreage estimates for jurisdictional wetlands in the review area: 12.778 acres.

5. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 5T acres.

6. 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.

7. Impoundments of jurisdictional waters.⁹

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).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH 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: 5T
 Other factors. Explain: 5T

Identify water body and summarize rationale supporting determination: 5T

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 7T linear feet 7T width (ft).
 Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T
 Wetlands: 7T acres.

⁸See Footnote # 3.

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

¹⁰Prior 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.

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 Engineers 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 on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: 7T
- Other: (explain, if not covered above): 7T

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole 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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: 7T 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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: 7T acres.

SECTION IV: DATA SOURCES.

A. 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):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: 7T
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: 7T
- Corps navigable waters' study: 7T
- U.S. Geological Survey Hydrologic Atlas: 7T
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 7.5 Minute Middlefield
- USDA Natural Resources Conservation Service Soil Survey. Citation: Geauga County
- National wetlands inventory map(s). Cite name: 7.5 Minute Middlefield
- State/Local wetland inventory map(s): 7T
- FEMA/FIRM maps: 7T
- 100-year Floodplain Elevation is: 7T (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Googlemaps (ORM2), bing.com
 - or Other (Name & Date): 7T
- Previous determination(s). File no. and date of response letter: 7T
- Applicable/supporting case law: 7T
- Applicable/supporting scientific literature: 7T
- Other information (please specify): 7T

B. ADDITIONAL COMMENTS TO SUPPORT JD: 7T

Peter J. Krakowiak
Project Manager

July 16, 2014
Date

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 DETERMINATION (JD): June 6, 2014

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRB, 528 Joint Venture LLC, DA No. 2013-01344, Stream 3, Wetland F. and Wetland G; Form 3 of 4

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Ohio County/parish/borough: Geauga City: Middlefield
Center coordinates of site (lat/long in degree decimal format): Lat. 41.4542 °, Long. -81.0589 °
Universal Transverse Mercator: 5T

Name of nearest waterbody: Tare Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Cuyahoga River
Name of watershed or Hydrologic Unit Code (HUC): 04110002

- 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: 5T
- Field Determination. Date(s): April 24, 2014, 5T

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review 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: 5T

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "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):¹

- 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: 1,360 linear feet: 5 width (ft) and/or 5T acres.
Wetlands: 0.163 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): 5T

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: 7T

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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).

³ Supporting documentation is presented in Section III.F.

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: 7T

Summarize rationale supporting determination: 5T

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": 5T

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 waterbody⁴ 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: square miles

Drainage area: 809 square miles

Average annual rainfall: 47.28 inches

Average annual snowfall: 97.1 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through 4 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 20-25 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: 5T

Identify flow route to TNW⁵: Stream 3 flows west and combines with Stream 2. Stream 2 flows south then west/northwest into Tare Creek. Tar Creek flows west into the East Branch Cuyahoga River that connects to the main stem of the Cuyahoga River, which is designated as a TNW further downstream.

Tributary stream order, if known: 5T

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**
- Natural
 - Artificial (man-made). Explain: 5T
 - Manipulated (man-altered). Explain: 5T

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ 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 properties with respect to top of bank (estimate):

Average width: 3 feet
Average depth: <1 foot
Average side slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

- | | | |
|---|---|-----------------------------------|
| <input checked="" type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input checked="" type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: 5T | |
| <input type="checkbox"/> Other. Explain: 5T | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Relatively stable

Presence of run/riffle/pool complexes. Explain: 5T

Tributary geometry: Meandering

Tributary gradient (approximate average slope): 5T%

(c) Flow:

Tributary provides for: Seasonal Flow

Estimate average number of flow events in review area/year: 11-20

Describe flow regime: 5T

Other information on duration and volume: 5T

Surface flow is: Discrete and Confined Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

Tributary has (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input checked="" type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input checked="" type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input checked="" type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input checked="" type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community 5T |
| <input type="checkbox"/> other (list): 5T | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: 5T | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): 5T | |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Water color was clear at the time of the site visit

Identify specific pollutants, if known: 5T

⁶A 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.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- Riparian corridor. Characteristics (type, average width): The stream is immediately buffered emergent and forested habitat. There is an agricultural field to the north that limits its width towards the upstream end. The downstream buffer is also limited on the southwest side due to the presence of a bike and buggy trail. The buffer averages greater than 30 feet.
- Wetland fringe. Characteristics: The majority of Stream 3 flows through Wetland E.
- Habitat for:
 - Federally Listed species. Explain findings: 5T
 - Fish/spawn areas. Explain findings: 5T
 - Other environmentally-sensitive species. Explain findings: 5T
 - Aquatic/wildlife diversity. Explain findings: Stream 3 provides habitat for macroinvertebrates

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: Wetland F is 0.026 acre and Wetland G is 0.137 acre (on-site)

Wetland type. Explain: Wetland F is emergent and Wetland G is forested

Wetland quality. Explain: Moderate

Project wetlands cross or serve as state boundaries. Explain: 5T

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent Flow Explain: Wetland F and Wetland G directly abut Stream 3 and flow into it on an intermittent

basis.

Surface flow is: Discrete and Confined

Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain: 5T

Separated by berm/barrier. Explain: 5T

(d) Proximity (Relationship) to TNW

Project wetlands are 30 (or more) river miles from TNW.

Project waters are 25-30 aerial (straight) miles from TNW.

Flow is from: Wetland to Navigable Waters

Estimate approximate location of wetland as within the 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No standing water was observed during the site visit

Identify specific pollutants, if known: 5T

(iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width): A combination of forested and emergent habitat averaging at least 30 feet is present
- Vegetation type/percent cover. Explain: Combination of forested and emergent
- Habitat for:
 - Federally Listed species. Explain findings: 5T
 - Fish/spawn areas. Explain findings: 5T
 - Other environmentally-sensitive species. Explain findings: 5T
 - Aquatic/wildlife diversity. Explain findings: Wetland F and Wetland G provides habitat for amphibians and macroinvertebrates.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 2

Approximately (0.163) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland F	Yes	0.026	5T	5T
Wetland G	Yes	0.137	5T	5T

Summarize overall biological, chemical and physical functions being performed: The wetlands provide the following functions and services: hydrologic flux and storage including floodwater and runoff attenuation and release; sediment and nutrient transport and retention; pollutant attenuation and release; biogeochemical cycling and storage; stream channel stability via serving as a natural buffer; biological productivity of micro/macro flora and fauna, decomposition, and community structure; and wildlife support including providing habitat.

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: 5T
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: 5T

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: 5T linear feet 5T width (ft), Or, 5T acres.
 - Wetlands adjacent to TNWs: 5T 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: 5T.
 - 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: Stream 3 had flow during the site visit, during the delineation site visit, and is visible on aerial photography.
Provide estimates for jurisdictional waters in the review area (check all that apply):
 - Tributary waters: 1,360 linear feet 5 width (ft).
 - Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T

3. Non-RPWs⁸ 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: 7T acres.
Identify type(s) of waters: 7T

4. 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: 5T
 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: Wetland F and Wetland G directly connect and are contiguous to Stream 3.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.163 acres.

5. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 5T acres.

6. 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.

7. Impoundments of jurisdictional waters.⁹

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).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH 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: 5T
 Other factors. Explain: 5T

Identify water body and summarize rationale supporting determination: 5T

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 7T linear feet 7T width (ft).
 Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T
 Wetlands: 7T acres.

⁸See Footnote # 3.

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

¹⁰Prior 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.

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 Engineers 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 on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: 7T
- Other: (explain, if not covered above): 7T

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole 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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: 7T 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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: 7T acres.

SECTION IV: DATA SOURCES.

A. 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):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: 7T
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: 7T
- Corps navigable waters' study: 7T
- U.S. Geological Survey Hydrologic Atlas: 7T
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 7.5 Minute Middlefield
- USDA Natural Resources Conservation Service Soil Survey. Citation: Geauga County
- National wetlands inventory map(s). Cite name: 7.5 Minute Middlefield
- State/Local wetland inventory map(s): 7T
- FEMA/FIRM maps: 7T
- 100-year Floodplain Elevation is: 7T (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Googlemaps (ORM2), bing.com
 - or Other (Name & Date): 7T
- Previous determination(s). File no. and date of response letter: 7T
- Applicable/supporting case law: 7T
- Applicable/supporting scientific literature: 7T
- Other information (please specify): 7T

B. ADDITIONAL COMMENTS TO SUPPORT JD: 7T

Peter J. Krakowiak
Project Manager

July 16, 2014
Date

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 DETERMINATION (JD): June 6, 2014

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRB, 528 Joint Venture LLC, DA No. 2013-01344, Stream 4, Wetlands H, I, J, K, L, M, N, O, and P; Form 4 of 4

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Ohio County/parish/borough: Geauga City: Middlefield
Center coordinates of site (lat/long in degree decimal format): Lat. 41.4542 °, Long. -81.0589 °
Universal Transverse Mercator: 5T

Name of nearest waterbody: Tare Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Cuyahoga River
Name of watershed or Hydrologic Unit Code (HUC): 04110002

- 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: 5T
- Field Determination. Date(s): April 24, 2014, 5T

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no “*navigable waters of the U.S.*” within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review 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: 5T

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There 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):¹

- 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: 1,573 linear feet: 5 width (ft) and/or 5T acres.
Wetlands: 2.832 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): 5T

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: Wetlands J, M, O, and P were determined to have no surface or shallow subsurface water connection with the downstream TNW. They were also determined to have no ecological connection with the downstream TNW as there was no evidence of the presence of

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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).

³ Supporting documentation is presented in Section III.F.

amphibians or other aquatic habitats that would share a connection between the wetlands and the downstream TNW.

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: 7T

Summarize rationale supporting determination: 5T

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": 5T

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 waterbody⁴ 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: square miles

Drainage area: 809 square miles

Average annual rainfall: 47.28 inches

Average annual snowfall: 97.1 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 20-25 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: 5T

Identify flow route to TNW⁵: Water from Stream 4 flows west into Wetland E where it connects to Stream 3. Stream 3 flows west and combines with Stream 2. Stream 2 flows south then west/northwest into Tare Creek. Tar Creek flows west into the East Branch Cuyahoga River that connects to the main stem of the Cuyahoga River, which is designated as a TNW further downstream.

Tributary stream order, if known: 5T

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural

Artificial (man-made). Explain: 5T

Manipulated (man-altered). Explain: 5T

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ 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 properties with respect to top of bank (estimate):

Average width: 5 feet
Average depth: <1 foot
Average side slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

- | | | |
|---|---|-----------------------------------|
| <input checked="" type="checkbox"/> Silts | <input checked="" type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: 5T | |
| <input type="checkbox"/> Other. Explain: 5T | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Relatively stable

Presence of run/riffle/pool complexes. Explain: 5T

Tributary geometry: Meandering

Tributary gradient (approximate average slope): 5T%

(c) **Flow:**

Tributary provides for: Seasonal Flow

Estimate average number of flow events in review area/year: 11-20

Describe flow regime: 5T

Other information on duration and volume: 5T

Surface flow is: Discrete and Confined Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

Tributary has (check all that apply):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input checked="" type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input checked="" type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input checked="" type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input checked="" type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community 5T |
| <input type="checkbox"/> other (list): 5T | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: 5T | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): 5T | |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Water color was clear at the time of the site visit

Identify specific pollutants, if known: 5T

⁶A 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.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- Riparian corridor. Characteristics (type, average width): With the exception of a narrower buffer near the bike and buggy trail along the south border, Stream 4 have a forested buffer at least 100 feet wide on each side.
- Wetland fringe. Characteristics: Portions of Stream 4 flows through Wetland E and Wetland I.
- Habitat for:
 - Federally Listed species. Explain findings: 5T
 - Fish/spawn areas. Explain findings: 5T
 - Other environmentally-sensitive species. Explain findings: 5T
 - Aquatic/wildlife diversity. Explain findings: Stream 4 provides habitat for macroinvertebrates

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: Wetland H is 0.056 acre, Wetland I is 2.251 acres (on-site), Wetland K is 0.045 acre (on-site), Wetland L is 0.410 acre (on-site), and Wetland N is 0.070 acre
Wetland type. Explain: Wetland H, I, and L are forested, Wetland K is emergent, Wetland N is scrub-shrub
Wetland quality. Explain: Moderate to high
Project wetlands cross or serve as state boundaries. Explain: 5T

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent Flow Explain: Wetlands H and I directly abut Stream 4 and flow into it on an intermittent basis. Wetlands K, L, and N are adjacent to Stream 4 flowing intermittently into it.

Surface flow is: Discrete and Confined

Characteristics: 5T

Subsurface flow: Unknown Explain findings: 5T

Dye (or other) test performed: 5T

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: Wetland K, L, and N have connections to Stream 4 through a non-jurisdictional drainageway or by overland sheetflow

Ecological connection. Explain: 5T

Separated by berm/barrier. Explain: 5T

(d) Proximity (Relationship) to TNW

Project wetlands are 30 (or more) river miles from TNW.

Project waters are 25-30 aerial (straight) miles from TNW.

Flow is from: Wetland to Navigable Waters

Estimate approximate location of wetland as within the 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No standing water was observed during the site visit

Identify specific pollutants, if known: 5T

(iii) Biological Characteristics. Wetland supports (check all that apply):

Riparian buffer. Characteristics (type, average width): A forested buffer is located along the majority of the wetlands and stream corridor averaging at least 100 feet in width.

Vegetation type/percent cover. Explain: Combination of forested and emergent

Habitat for:

Federally Listed species. Explain findings: 5T

Fish/spawn areas. Explain findings: 5T

Other environmentally-sensitive species. Explain findings: 5T

Aquatic/wildlife diversity. Explain findings: Wetlands H, I, K, L, and N provide habitat for amphibians and macroinvertebrates.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 5

Approximately (2.832) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland H	Yes	0.056	5T	5T
Wetland I	Yes	2.251	5T	5T
Wetland K	No	0.045	5T	5T
Wetland L	No	0.410		
Wetland N	No	0.070		

Summarize overall biological, chemical and physical functions being performed: The wetlands provide the following functions and services: hydrologic flux and storage including floodwater and runoff attenuation and release; sediment and nutrient transport and retention; pollutant attenuation and release; biogeochemical cycling and storage; stream channel stability via serving as a natural buffer; biological productivity of micro/macro flora and fauna, decomposition, and community structure; and wildlife support including providing habitat.

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: 5T
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: Wetland K and Wetland L flow through a non-jurisdictional drainageway through Wetland I and into Stream 4. Water from Wetland N overland sheetflows west through Wetland L, through the non-jurisdictional drainageway, and then into Stream 4. Water from Stream 4 flows west into Wetland E where it connects to Stream 3. Stream 3 flows west and combines with Stream 2. Stream 2 flows south then west/northwest into Tare Creek. Tare Creek flows west into the East Branch Cuyahoga River that connects to the main stem of the Cuyahoga River, which is designated as a TNW further downstream.

The stream and its adjacent wetlands have hydrologic connectivity to the Cuyahoga River, thereby providing a significant nexus between the stream and its adjacent wetlands and the downstream TNW. Hydrologic connectivity refers to the flow that transports organic matter and nutrients, energy, and aquatic organisms throughout the system (Freeman et al., 2006). Stream 4 influences the chemistry and physical conditions of the downstream TNW through its hydrologic input, storage, and transport of sediments and energy. Rainfall, snowmelt, and stormwater runoff within the drainage area of Stream 4 provides hydrology to the downstream receiving waters. The stream contributes to the chemical and physical make-up of the Cuyahoga River through its ability to convey sediments, chemicals, nutrients, and contaminants downstream to the Cuyahoga River. The subject wetlands directly affect the nature of the water entering Stream 4 and its downstream receiving waters, both in quantity and chemical/physical attributes. This occurs through the reduction of runoff rates of water received by Stream 4 resulting from attenuation and storage of floodwaters; capture of water through evapotranspiration; storage of runoff; and filtering and/or storage of nutrients, chemicals, and sediments contained in rainfall, runoff, or other hydrologic inputs. Ultimately, this affects the downstream TNW as the wetlands alter the amount of flow reaching the TNW and furthermore, any additional matter such as nutrients, chemicals, sediments, and pollutants carried in that flow.

The Cuyahoga River Watershed has impairments including increasing urbanization bringing impervious surfaces, construction at headwaters reducing stream function, increased erosion, sediment which impairs aquatic life and widens flood areas, habitat loss, and loss of wetlands (Cuyahoga River Community Planning Organization). Since the wetlands and stream are located in close proximity to commercial developments, a major roadway, and agricultural fields and they receive a majority of their hydrology from runoff associated with the adjacent development and agricultural fields, they provide an important function of reducing the effects of runoff and storm sewer impacts on the downstream TNW. The stream conveys water that has been filtered from the wetlands to the downstream TNW. Combined, the wetlands and stream supply the downstream TNW with a cleaner source of water that will aid in reducing impairments.

Due to the physical, biological, and chemical connectivity of Stream 4 and its adjacent wetlands as described above, it has been determined that Stream 4 and its adjacent wetlands have a significant nexus with the downstream TNW, the Cuyahoga River as the functions and services provided by the stream and its adjacent wetlands provide more than a speculative effect on the physical integrity of the Cuyahoga River.

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: 5T linear feet 5T width (ft), Or, 5T acres.
- Wetlands adjacent to TNWs: 5T 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: 5T.
- 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: Stream 4 had flow during the site visit, during the delineation site visit, and is visible on aerial photography.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 1,573 linear feet 5 width (ft).
- Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T

3. Non-RPWs⁸ 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: 7T acres.
Identify type(s) of waters: 7T

4. 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: 5T
 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: Wetland H and Wetland I directly connect and are contiguous to Stream 4.

Provide acreage estimates for jurisdictional wetlands in the review area: 2.307 acres.

5. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.525 acres.

6. 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.

7. Impoundments of jurisdictional waters.⁹

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).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH 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: 5T
 Other factors. Explain: 5T

Identify water body and summarize rationale supporting determination: 5T

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 7T linear feet 7T width (ft).
 Other non-wetland waters: 7T acres.
Identify type(s) of waters: 7T
 Wetlands: 7T acres.

⁸See Footnote # 3.

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

¹⁰Prior 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.

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 Engineers 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 on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: 7T
- Other: (explain, if not covered above): 7T

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole 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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: Wetland J ~0.184 acre, Wetland M ~0.024 acre, Wetland O ~0.350 acre, Wetland P ~0.034 acre.

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): 7T linear feet 7T width (ft).
- Lakes/ponds: 7T acres.
- Other non-wetland waters: 7T acres. List type of aquatic resource: 7T.
- Wetlands: 7T acres.

SECTION IV: DATA SOURCES.

A. 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):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: 7T
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: 7T
- Corps navigable waters' study: 7T
- U.S. Geological Survey Hydrologic Atlas: 7T
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 7.5 Minute Middlefield
- USDA Natural Resources Conservation Service Soil Survey. Citation: Geauga County
- National wetlands inventory map(s). Cite name: 7.5 Minute Middlefield
- State/Local wetland inventory map(s): 7T
- FEMA/FIRM maps: 7T
- 100-year Floodplain Elevation is: 7T (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Googlemaps (ORM2), bing.com
 - or Other (Name & Date): 7T
- Previous determination(s). File no. and date of response letter: 7T
- Applicable/supporting case law: 7T
- Applicable/supporting scientific literature: 7T
- Other information (please specify): 7T

B. ADDITIONAL COMMENTS TO SUPPORT JD: 7T

Peter J. Krakowiak
Project Manager

July 16, 2014
Date