

**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): October 16, 2019**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Detroit District, Michiana Branch, Buzbee Property JD, LRE-2019-00434-102-A19**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION: 6800 Flutter Road**

State: Indiana County/parish/borough: Allen City: Fort Wayne  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.161421° N, Long. -85.056007° W.  
Universal Transverse Mercator: Zone 16, X663097, Y4558498

Name of nearest waterbody: Tiernan Ditch

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Maumee River

Name of watershed or Hydrologic Unit Code (HUC): 04100003, Great Lakes Region, Western Lake Erie

- 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: August 26, 2019, October 9, 2019  
 Field Determination. Date(s): June 20, 2019, July 2, 2019

**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: .

**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):<sup>1</sup>**

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 1,349 linear feet: width (ft) and/or acres.  
Wetlands: 2.11 acres.

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

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

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

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

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

<sup>3</sup> 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: .

Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: .

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

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

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

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

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

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

(i) **General Area Conditions:**

Watershed size: 71.39 **acres**  
Drainage area: 71.39 **acres**  
Average annual rainfall: 38 inches  
Average annual snowfall: 30 inches

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

- Tributary flows directly into TNW.  
 Tributary flows through **2** tributaries before entering TNW.

Project waters are **10-15** 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: .

Identify flow route to TNW<sup>5</sup>: Water from the forested wetland labeled Section VI flows through a non-RPW (off-site roadside drainage) to Section IV (RPW), the unnamed tributary to Tiernan Ditch with abutting wetland. Tiernan Ditch

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

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

flows directly into the St. Joseph River. The St. Joseph River joins the St. Mary's River to form the Maumee River, a TNW.

Tributary stream order, if known: .

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

**Tributary is:**

Natural

Artificial (man-made). Explain: .

Manipulated (man-altered). Explain: The southern portion of the unnamed tributary to Tiernan

Ditch (Section IV - RPW) has been culverted at Interstate-469 and appears to have been excavated and straightened to accept waters from the roadside drainage into its channel and abutting wetlands. The northern portion of the unnamed tributary to Tiernan Ditch (Section IV - RPW) may also have been excavated and straightened to promote drainage into Tiernan Ditch. .

**Tributary properties with respect to top of bank (estimate):**

Average width: feet

Average depth: feet

Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

Silts

Sands

Concrete

Cobbles

Gravel

Muck

Bedrock

Vegetation. Type/% cover:

Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The tributary to Tiernan Ditch (Section IV - RPW) at its south end varies in width (around a few feet) and has low vegetated banks. A high amount of silt and sediment is present in the southern portion of the RPW (Section IV) where water enters from the roadside drainage along Interstate-469. The RPW (Section IV) flows through the 1.44 acre forested wetland (also labeled Section IV). At the northern end where the RPW (Section IV) outlets into Tiernan Ditch, the tributary exhibits steeper, V-notch, undercut banks.

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

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: Flow occurs during and post precipitation events, and during snow melt. The RPW (Section IV) and abutting wetland (Section IV) are charged by upland runoff, roadside drainage entering from the culvert at Interstate-469, and by water from wetland Section VI that enters the roadside drainage. A high water table also appears to be present, contributing to wetland hydrology and tributary flow. The area has been forested going back to 1938 (historical aerial photos) indicating that the area was likely unsuitable for farming.

Other information on duration and volume: Water was flowing though the unnamed tributary to Tiernan Ditch (Section IV - RPW) at the time of inspection. The last recorded precipitation event in the area had occurred 5 days prior and measured 0.03 of an inch. Flow events are likely frequent and lasting in duration.

Surface flow is: **Discrete and confined.** Characteristics: .

Subsurface flow: **Pick List.** Explain findings: .

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks

OHWM<sup>6</sup> (check all indicators that apply):

clear, natural line impressed on the bank

changes in the character of soil

shelving

vegetation matted down, bent, or absent

leaf litter disturbed or washed away

sediment deposition

water staining

other (list):

the presence of litter and debris

destruction of terrestrial vegetation

the presence of wrack line

sediment sorting

scour

multiple observed or predicted flow events

abrupt change in plant community

Discontinuous OHWM.<sup>7</sup> Explain: The RPW portion of Section IV enters and exits the forested wetland Section IV, which was inundated at the time of inspection.

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

<sup>7</sup>Ibid.

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):                             |  |

**(iii) Chemical Characteristics:**

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

Explain: The water entering the unnamed tributary to Tiernan Ditch (Section IV - RPW) would have chemical characteristics typical of roadside drainage and would transport pollutants such as oils, salt, and grease. The chemical composition of the tributary would vary according to precipitation frequency and amount, roadway treatment, and traffic patterns. Wetlands Section VI and Section IV filter pollutants and retain floodwaters, acting as a buffer to protect the water quality of Teirnan Ditch, the St. Joseph River, and the Maumee River (TNW).

Identify specific pollutants, if known: .

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

Riparian corridor. Characteristics (type, average width): The unnamed tributary to Tiernan Ditch (Section IV - RPW) is situated within a large forested tract, approximately 20 acres in size on-site, and immediately adjacent to other forestland. This forested area is connected to the riparian zone of Tiernan Ditch, a corridor to the St. Joseph River and the downstream TNW (Maumee River).

Wetland fringe. Characteristics: Forested wetland which would likely meet the definition of "Forested swamp" and "Wet-mesic floodplain forest", both of which are considered state significant high quality natural communities as listed by the Indiana Natural Heritage Data Center .

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: Mussel shells (remains from predation event) were observed on the banks of Tiernan Ditch at the July 2, 2019 site inspection. Freshwater mussel presence in Tiernan Ditch indicates its tributaries and adjacent wetlands contribute to water quality that provides habitat for fisheries and freshwater mussels.

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: 1.88 acres

Wetland type. Explain: Forested wetland.

Wetland quality. Explain: Forested wetland which would likely meet the definition of "Forested swamp" and "Wet-mesic floodplain forest", both of which are considered state significant high quality natural communities as listed by the Indiana Natural Heritage Data Center .

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

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: .

Surface flow is: **Discrete and confined**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: Forested wetland Section VI drains via roadside drainage into the unnamed tributary to Tiernan Ditch (Section IV - RPW) with abutting wetland (Section IV). This flowpath was observed in the field, is visible on aerial imagery, and is delineated in the National Hydrography Dataset (NHD).

Ecological connection. Explain: Wetland Section VI and wetland Section IV are part of the 20+ acres forested habitat in the review area.

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **10-15** river miles from TNW.

Project waters are **2-5** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **Pick List** 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: Wetland Section VI receives surface water from the surrounding forest and adjacent farmland with interspersed residential areas; surface water coloration appeared normal. Wetlands Section IV receives water from the adjacent forest, agricultural fields, residential areas, and the roadside drainage along Interstate-465. The chemical composition of the the wetland would vary according to precipitation event frequency and amount, roadway treatment, and traffic patterns. Wetlands Section VI and Section IV filter pollutants and retain floodwaters, acting as a buffer to protect the water quality of Teirman Ditch, the St. Joseph River, and the Maumee River (TNW) .

Identify specific pollutants, if known: . . .

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

Riparian buffer. Characteristics (type, average width): Section VI is situated within a large forested tract, the forested area is approximately 20 acres in size on-site and is immediately adjacent to additional forestland off-site. This forested area is

connected to the riparian zone of Tiernan Ditch which acts as a corridor to the St. Joseph River and the downstream TNW, the Maumee River.

Vegetation type/percent cover. Explain: Forested wetland. Dominant species include *Acer saccharinum* (FACW), *Quercus palustris* (FACW), and *Ulmus rubra* (FAC).

Habitat for:

Federally Listed species. Explain findings: The mature trees and the riparian forest may provide habitat for two species of federally listed bats, *Myotis sodalis* and *Myotis septentrionalis*, which are on the USFWS Allen County species distribution list .

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings: Wood thrush (*Hylocichla mustelina*), a neotropical migrant with significant population decline that relies on forested areas to breed was heard singing onsite during the inspection, indicating the site is breeding territory for the forest dependent songbird. Mussel shells (remains from predation event) were observed on the banks of Tiernan Ditch, indicating a fishery, stream morphology, and water quality that supports habitat for freshwater mussels. The water quality and stream morphology of Tiernan Ditch is influenced, in part, by its tributaries and adjacent wetlands. The forested wetlands would likely meet the definition of "Forested swamp" and "Wet-mesic floodplain forest", both are considered state significant high quality natural communities as listed by the Indiana Natural Heritage Data Center.

Aquatic/wildlife diversity. Explain findings: Freshwater mussel presence in Tiernan Ditch indicates its tributaries and adjacent wetlands contribute to water quality that provides habitat for fisheries and freshwater mussels. Additionally, wetland Section VI being seasonally inundated may provide breeding habitat for amphibians, a class of wildlife that according to the USFWS is experiencing population decline nationwide. The forested wetland also provides habitat for a variety of pollinators and other insects, which according to USFWS, there is increasing evidence of decline in pollinator abundance and diversity nationally.

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

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

Approximately ( 1.88 ) 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>
Section IV Y	1.44	Section IV N	0.44

Summarize overall biological, chemical and physical functions being performed: The tributary of Tiernan Ditch (Section IV, 282 linear feet), a RPW, its abutting wetland Section IV (1.44 acres) and the adjacent wetland Section VI (0.44 acres) perform biological, chemical, and physical functions which influence the integrity of downstream waters, including the Maumee River, a TNW. Biological functions include, but are not limited to, breeding and foraging habitat for sensitive and declining species such as neotropical migrant birds, amphibians, and pollinators. The forested wetlands produce sources of nutrients that contribute to the downstream foodwebs for fisheries and other aquatic and/or semi-aquatic species. The wetlands also retain and filter surface waters to improve water quality downstream by settling and adsorbing particulates and potential contaminants received from roadside drainage. The wetlands serve as retention areas for floodwaters during precipitation events and slow flow of floodwaters to downstream waterbodies. Tiernan Ditch, its tributary Section IV, and its abutting wetland Section IV are all located within delineated FEMA/FIRM Floodway/Flood Hazard areas. The Corps of Engineers along with the City of Fort Wayne have implemented flood control projects downstream of the subject wetlands and tributary on the St. Joseph and Maumee Rivers. Decreasing the flood storage capacity of wetland Section VI and Section IV would likely contribute to increased downstream flood hazards. Additionally, the state of Indiana has issued Fish Consumption Advisories on the St. Joseph River and the Maumee River. The Maumee River at its mouth is a designated EPA Area of Concern in part because of the river's pollutants and sediments causing eutrophication of Lake Erie. Negative impacts to the Maumee River's tributaries and adjacent wetlands chemical, physical, and biological functions would contribute to further degradation of the TNW's water quality, flood hazards, ecological integrity, and aquatic functions.

### C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The tributary of Tiernan Ditch labeled Section IV (282 linear feet), a seasonal RPW, its abutting wetland Section IV (1.44 acres) and the adjacent wetland Section VI (0.44 acres) perform biological, chemical, and physical functions which influence

the integrity of downstream waters, including the Maumee River, a Traditional Navigable Water (TNW). Water flows from forested wetland Section VI through a non-RPW (off-site roadside drainage) to reach an unnamed tributary to Tiernan Ditch (Section IV - RPW) with abutting forested wetland. Tiernan Ditch flows directly into the St. Joseph River. The St. Joseph River joins the St. Mary's River to form the Maumee River (TNW). The Maumee River watershed was historically part of the Great Black Swamp which was extensively drained and cleared in the late 1800's to facilitate European settlement and convert the area to agricultural land. Prior to the massive drainage projects, the Maumee watershed was largely forested wetland; now only small fragments or relic portions of wetland remain scattered throughout the watershed. The ditches excavated to drain the Great Black Swamp are conduits for fast drainage and provide little to no flood retention or ability to filter/retain pollutants. The St. Joseph River Watershed Management Plan (28 February 2006) states that many streams within the watershed have been channelized and straightened to improve water flow downstream. Additionally, according to the 2006 report nonpoint source pollution makes up 75% of the water pollution in the St. Joseph River. Sources of the nonpoint source pollution in the watershed include agricultural fields, residential areas, roadways, and other impervious surfaces. Wetland Section VI, Wetland Section IV, and the RPW (Section IV) are situated within a forested area bordered by agricultural ground, residential development, and Interstate-469. Tributaries of the Maumee River, and the remaining adjacent wetlands, such as wetlands Section IV and VI, play a significant role in influencing the biological, chemical, and physical integrity of the TNW. Biological functions include, but are not limited to, breeding and foraging habitat for sensitive and declining species such as neotropical migrant birds, amphibians, and pollinators. The forested wetlands produce sources of nutrients that contribute to the downstream foodwebs for fisheries and other aquatic and/or semi-aquatic species. The wetlands also retain and filter surface waters to improve water quality downstream by settling and adsorbing particulates and contaminants received from roadside drainage. The wetlands also serve as retention areas for floodwaters during precipitation events and slow the flow of floodwaters to the downstream St. Joseph River and Maumee River. Tiernan Drain, its tributary Section IV, and wetland Section IV are all located within delineated FEMA/FIRM Floodway/Flood Hazard areas. The Corps of Engineers along with the City of Fort Wayne have implemented large-scale flood control projects downstream of the subject wetlands and tributary on the St. Joseph and Maumee Rivers. The Fort Wayne East Indiana Levee System downstream of the subject wetlands and tributary reduces the flood risk for approximately 5,300 people and 2,300 structures within the City of Fort Wayne. The system consists of 26,000 feet (4.9 miles) of earthen levees, concrete floodwalls, stoplog closures, and an interior drainage system including pumping stations. Decreasing the flood storage capacity of wetland Section VI and Section IV would likely contribute to increased downstream flood hazards and reduce the effectiveness of current and future Corps flood control works in Fort Wayne. Additionally, the state of Indiana has issued Fish Consumption Advisories on the St. Joseph River and the Maumee River. The lower reaches of the Maumee River near Lake Erie is an EPA Area of Concern (AOC) in part, because of pollutants and sediments causing eutrophication of Lake Erie, and is subject to Remedial Action Plan (RAP). A draft Watershed Restoration Plan was developed in 2006. Limiting pollutants of any type in the upstream reaches of the Maumee River would assist in the realization of the Maumee River AOC RAP goals and watershed restoration. Negative impacts to the Maumee River's tributaries and adjacent wetlands chemical, physical, and biological functions would contribute to further degradation of the Maumee River and Lake Erie's water quality, flood hazards, ecological integrity, and aquatic functions. .

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

**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

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

**2. RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tiernan Ditch exhibits a defined bed and bank with an Ordinary High Water Mark (OHWM) and is depicted as a perennial stream on the USGS topographic map. According to the Allen County GIS viewer, the stream is an Allen County regulated drain. Water was flowing through the stream at the time of Corps inspections.
- 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: The unnamed tributary to Tiernan Ditch (Section IV) is a 282 linear foot seasonal RPW with a defined bed and bank and exhibits an OHWM. It is depicted as an intermittent stream on the USGS topographic map. There was water flowing in the tributary at the July 2, 2019 inspection (the tributary was not inspected by the Corps on June 20, 2019). The last measurable precipitation event that was recorded in the area had occurred 5 days prior and measured 0.03 of an inch.

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

- Tributary waters: **1,349** linear feet width (ft).
  - Other non-wetland waters: acres.
- Identify type(s) of waters: .

**3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.**

<sup>8</sup>See Footnote # 3.



- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

- Tributary waters:            linear feet            width (ft).  
 Other non-wetland waters:            acres.

Identify type(s) of waters:            .

**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: **Wetland Section I and Wetland Section V directly abut Section II, Tiernan Ditch, a perennial RPW. The wetlands are situated at the banks of Tiernan Ditch and drain directly into the stream.**  
 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 IV is contiguous with the 282 linear feet of Section IV that is an RPW. The seasonal RPW flows through the wetland; the RWP and wetland are labeled as one feature in the delineation report.

Provide acreage estimates for jurisdictional wetlands in the review area: **1.67** 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: **0.44** 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.<sup>9</sup>**

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):<sup>10</sup>**

- 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:            .  
 Other factors. Explain:            .

**Identify water body and summarize rationale supporting determination:**            .

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

- Tributary waters:            linear feet            width (ft).

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

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

- Other non-wetland waters:      acres.  
Identify type(s) of waters:      .
- Wetlands:      acres.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of 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:      .
- Other: (explain, if not covered above):      .

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

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams):      linear feet,      width (ft).
- Lakes/ponds:      acres.
- Other non-wetland waters:      acres. List type of aquatic resource:      .
- Wetlands:      acres.

**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: Wetland Delineation Report, Buzbee Property (Revised 7/9/2019). Prepared for: James Morlan, North Eastern Group, 10808 La Cabrea Lane, Fort Wayne, Indiana 46845. Prepared by: Earth Source, Inc., 14921 Hand Road, Fort Wayne, Indiana 46818.
- 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:      .
- Corps navigable waters' study:      .
- U.S. Geological Survey Hydrologic Atlas:04100003.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:1:24K: Cedarville, Indiana Quadrangle.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Hydric Rating by Map Unit - Allen County, Indiana. Web Soil Survey.
- National wetlands inventory map(s). Cite name: USFWS Online Wetlands Mapper.
- State/Local wetland inventory map(s):      .
- FEMA/FIRM maps: FIRM Panel 18003C0105G, Flood Hazard Zone 18003C.
- 100-year Floodplain Elevation is:      (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):Allen County Engineering View iMap historical aerials dated 1938, 1957, 1964, 1972, 1976, 1995, 1999, 2003, 2006, 2008, 2009, 2012, 2015, and 2018.  
or  Other (Name & Date): Wetland Delineation report photos from May 16, 2019. Corps inspection photos from June 20, 2019 and July 2, 2019.
- Previous determination(s). File no. and date of response letter:      .
- Applicable/supporting case law:      .
- Applicable/supporting scientific literature: "Drainage Areas of Indiana Streams," 1975. R. E. Hoggart. USGS Water Resources Division and the Indiana Department of Natural Resources Division of Water; "St. Joseph River Watershed Management Plan: Three States, Six Counties, One Watershed" prepared by: The St. Joseph River Watershed Initiative, February 28, 2006. Draft "Maumee Area of Concern Stage 2, Watershed Restoration Plan." January 2006. Developed by: Maumee RAP, Duck and Otter Creeks Partnership, Ohio Environmental Protection Agency, and the Toledo Metropolitan Area Council of Governments.
- Other information (please specify):; "Indiana County Endangered, Threatened and Rare Species List. County: Allen," Indiana Natural Heritage Data Center, Division of Nature Preserves, Indiana Department of Natural Resources; USFWS Indiana county Distribution of Federally-Listed Threatened, Endangered and Candidate Species, dated March 7, 2019; "Navigable Water of the United

States within the Regulatory Jurisdiction of the U.S. Army Corps of Engineers Detroit District". Updated 04 Dec 2018; Allen County iMap, GIS Engineering Viewer, <http://www.acimap.us/engineering.html>; Record of Climatological Observations June 2019 and July 2019, Station Fort Wayne 7.0 NE, IN US US1NAL0039, U.S. Department of Commerce, National Oceanic & Atmospheric Administration; "Indiana Fish Consumption Advisory Map 2019," <https://www.in.gov/isdh/23650.htm>; Corps of Engineers, "National Levee Database," <https://levees.sec.usace.army.mil/#/>; EPA, "Maumee River AOC," <https://www.epa.gov/great-lakes-aocs/about-maumee-river-aoc>; US Army Corps of Engineers, Detroit District "Regulatory Viewer"; USFWS, "Conserving Amphibians" <https://www.fws.gov/endangered/news/amphibians.html>; USFWS. "Pollinators" <https://www.fws.gov/pollinators/>; USGS, "Breeding Bird Survey" <https://www.pwrc.usgs.gov/bbs/>; "Purdue Watershed Delineation, Great Lakes Regional L-THIA GLWMS," <http://lthia.agriculture.purdue.edu/>.

## **B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Tiernan Ditch exhibits an Ordinary High Water Mark (OHWM) with a defined bed and bank and meets the definition of a perennial Relatively Permanent Water (RPW). Tiernan Ditch has an overall drainage area of 6.17 square miles. Labeled "Section II" in the delineation report, 1,067 linear feet of Tiernan Ditch lies within the review area. Directly abutting Tiernan Ditch is the 0.08 acres forested wetland labeled "Section I" and the 0.15 acre forested wetland labeled "Section V." Tiernan Ditch flows directly into the St. Joseph River. The St. Joseph River joins the St. Mary's River to become the Maumee River, which is a Traditional Navigable Water (TNW) of the United States. Therefore Tiernan Ditch and its abutting wetlands are considered waters of the United States.

The unnamed tributary of Tiernan Ditch, labeled "Section IV" in the delineation report exhibits an OHWM with a defined bed and bank and meets the definition of a RPW. Forested Wetland "Section IV" directly abuts and is contiguous with this unnamed tributary of Tiernan Ditch. Therefore, the 282 linear feet of the seasonal RPW and 1.44 acres of forested wetland are part of the tributary system of the Maumee River, and are considered waters of the United States.

The 0.44 acre forested wetland labeled "Section VI" drains to a roadside ditch along I-469 and as observed during the July 2, 2019 field inspection, and confirmed by the National Hydrography Dataset information and aerial photography, water from the roadside ditch flows into Section IV, a tributary of the Tiernan Ditch and ultimately the Maumee River, a TNW. The wetland Section VI has a surface hydrologic connection to the tributary system of the Maumee River. Section VI, in conjunction with the other wetlands and tributaries in the review area exhibit a nexus to the Maumee River, as they perform the biological, chemical, and physical functions described in the sections above that influence downstream waters. Therefore, wetland Section VI is also considered a water of the United States.