

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): April 20, 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Detroit District, Michiana Section, Orchard Valley JD, LRE-2021-01134-157

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Indiana County/parish/borough: Noble City: Avilla
Center coordinates of site (lat/long in degree decimal format): Lat. 41.371055° **N**, Long. -85.244075° **W**.
Universal Transverse Mercator: 16

Name of nearest waterbody: Eley Ditch

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

Name of watershed or Hydrologic Unit Code (HUC): HUC 12: 04100030703; Sycamore Creek-Little Cedar Creek

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: March/April, 2022

Field Determination. Date(s): November 02, 2021, December 09, 2021

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 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: 1,688 linear feet: 2-12 width (ft) and/or N/A acres.

Wetlands: .48 acres.

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

Elevation of established OHWM (if known): N/A.

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: **The Wetland Delineation Report (Report) identified an excavated detention basin (Section II) approximately**

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.

0.52 acres in size within the southwest corner of the Review Area. Based on review of historical aerial imagery taken in 1998, 2003, and 2017, and information contained in the Report dated October 06, 2021, and revised February 25, 2022, the detention basin was excavated/constructed in 2003 in conjunction with the development of the Orchard Valley sub-division. Although the basin was excavated out of a partially hydric Pewamo silty clay loam according to the NRCS Web Soil Survey, review of historic Indiana University Bloomington IHAPI imagery for Noble County (dated 1951, 1965, and 1973) prior to construction in 2003, did not indicate the potential presence of wetlands. This is based on a lack of observed wetland signature. Further, the area in which the detention basin is located appears to be in agricultural production prior to construction visible on aerial imagery taken in 2003. The detention basin is an artificial feature constructed/excavated in 2003 out of upland for the purpose of storing stormwater runoff from the Orchard Valley sub-division and is not considered a Water of the United States per 33 CFR 328.3(b). It is important to note that during the site inspection, evidence was observed of Eley Ditch BR #2 to BR #2 (Drain 3) entering the Review Area east of Section II. Within the Review Area, Eley Ditch BR #2 to BR #2 flows through two culverts and enters Section II. Eley Ditch BR #2 to BR #2 continues to flow west within a defined channel located within the boundaries of Section II. Eley Ditch BR #2 to BR #2 flows into a water control structure (stand-pipe) in the northwest corner of the detention basin (Section II) where it enters a sub-surface tile and discharges approximately 90' to the west outside of the Review Area. Section II is considered a non-regulated Water per 33 CFR 328.3(b), however, Eley Ditch BR #2 to BR #2 (Drain 3) is considered a Water of the United States and will be described more thoroughly in the sections below. Based on review of aerial photographs from 2003, 2012, 2017, and 2021, USGS topographic maps, and the NRCS Soil Survey, Section II is not an impoundment of Eley Ditch BR #2 to BR #2 and evidence suggests that Eley Ditch BR #2 to BR #2 formed within the detention basin following its construction.

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: N/A.

Summarize rationale supporting determination: N/A.

2. Wetland adjacent to TNW

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

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: .416 square miles

Drainage area: .416 square miles

Average annual rainfall: 39.5 inches

Average annual snowfall: 33.6 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are 30 (or more) 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: N/A.

Identify flow route to TNW⁵: Drain 1 (Eley Ditch BR #2), Drain 2 (Old People Home BR), and Drain 3 (Eley Ditch BR #2 to BR #2) were all observed flowing to stand-pipes/water control structures within the Review Area. Based upon

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.

Noble County Surveyor data sourced from the Noble County Beacon GIS viewer and visual observations during the site inspections, all three tributaries enter a county regulated sub-surface tile before returning to the surface as Eley Ditch BR #2 approximately 90' west of the Review Area. To the west of the Review Area, Eley Ditch BR #2 continues to flow west approximately 350' to its confluence with Eley Ditch BR #1 to form Eley Ditch. Eley Ditch flows south approximately 2.13 miles to its confluence with M. Good Ditch to form Davis Ditch. Davis Ditch flows approximately 3.14 miles south (changing names to Freeman Ditch along the way) to its confluence with Little Cedar Creek. Little Cedar Creek flows approximately 8.93 miles in a general southerly direction to its confluence with Cedar Creek west of Coldwater Road in Allen County, Indiana. Cedar Creek flows approximately 11.01 miles in a general southeast direction to its confluence with the St. Joseph River. The St. Joseph River flows approximately 13.6 miles in a general southwest direction to its confluence with the St. Mary's River to form the Maumee River (TNW) in Fort Wayne, Indiana.

Tributary stream order, if known: Tributaries Drain 1 (Eley Ditch BR #2), Drain 2 (Old People Home BR), and Drain 3 (Eley Ditch BR #2 to BR #2) are all 1st-order streams.

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

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: All three tributaries within the Review Area have been

manipulated, which is evident in their v-notch shape, presence of spoil piles along the banks, and in that they all terminate at stand-pipes/water control structures within the Review Area. These control structures convey water into a sub-surface tile identified using the Noble County Beacon GIS Viewer, where water is transported off-site to the west. More specifically, Drain 1 (Eley Ditch BR #2) was observed exhibiting both areas of standing water and areas absent of any water at the time of the site inspections. Water is visible within Drain 1 on aerial imagery from 2003 and 2017 and the Noble County Beacon GIS Viewer's description of Eley Ditch BR #2 as an "open drain", suggesting water is still conveyed along the surface. Further, the area was delineated and depicted as a stream feature in the Report which terminates at a stand-pipe/water control structure at the western edge of the Review Area. The visual observations of stand-pipes/water control structures along the path of Drain 1 and water heard flowing within a sub-surface tile in the vicinity of the delineated channel of Drain 1 made during the time of the site inspection, provides evidence that supports that Eley Ditch BR #2 has been encapsulated through unpermitted work in the past. Drain 3 (Eley Ditch BR #2 to BR #2) is a ditch running along the southern property boundaries of the Orchard Valley sub-division conveying water from a wetland outside of the Review Area immediately west of North Main Street. Multiple storm drains/water control structures were observed outside of the Review Area along the mapped channel of Drain 3 per the Noble County Beacon GIS Viewer. Though the Noble County Beacon GIS Viewer describes Eley Ditch BR #2 to BR #2 as an "open drain", observations of storm drains/water control structures and water heard flowing within a sub-surface tile in the vicinity of the delineated channel of Drain 3 made during the time of the site inspection, provides evidence that suggests that Eley Ditch BR #2 to BR #2 has been encapsulated through unpermitted work in the past. Drain 3 enters an excavated/constructed detention basin within the Review Area (Section II as described in the Report), however, maintains its flow through a defined channel within that basin until discharging into a stand-pipe/water control structure.

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

Average width: 6 feet
Average depth: .5 feet
Average side slopes: **2:1**.

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 tributaries showed little to no signs of erosion.

Presence of run/riffle/pool complexes. Explain: None observed.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 3 %

(c) Flow:

Tributary provides for: **Seasonal flow**

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

Describe flow regime: The flow of the tributaries within the Review Area is predominantly driven by seasonal events such as snowmelt and in response to precipitation events throughout the year. Based upon the observed presence of surface water flowing through the tributaries during the site inspections in November and December, and observations of water within the channels of the tributaries in aerial imagery taken in 2003, 2012, 2017, and 2021, the small tributaries were observed to exhibit flow at least seasonally during the year.

Other information on duration and volume: N/A.

Surface flow is: **Discrete and confined**. Characteristics: Water flowed through defined channels in each of the three tributaries observed in the Review Area.

Subsurface flow: **Unknown**. Explain findings: N/A.

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks

OHWM⁶ (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):

Discontinuous OHWM.⁷ Explain: .

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

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

High Tide Line indicated by:

oil or scum line along shore objects

fine shell or debris deposits (foreshore)

physical markings/characteristics

tidal gauges

other (list):

Mean High Water Mark indicated by:

survey to available datum;

physical markings;

vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

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

Explain: Tributaries Drain 1 (Eley Ditch BR #2) and Drain 2 (Old People Home BR) are located within a wooded setting within the Review Area surrounded by residential and agricultural development. Tributary Drain 3 (Eley Ditch BR #2 to BR #2) is an open ditch with little to no canopy coverage and directly abuts residential development. At the time of the site inspections, Drain 1, Drain 2, and Drain 3, as described in the Report, were all observed conveying water within their respective channels. The water was clear and cool. These small tributaries drain primarily upland forest and residentially developed land. It is anticipated that the tributaries would retain flood water, convey water to downstream abutting wetlands, and trap pollutants and sediment from runoff from surrounding development.

Identify specific pollutants, if known: N/A.

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):
 Wetland fringe. Characteristics:
 Habitat for:

- Federally Listed species. Explain findings:
 Fish/spawn areas. Explain findings:
 Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: The small streams provide some measure of foraging habitat as well as cover for mammals. Waterfowl and migratory birds may also use the streams for resting, feeding, or as breeding or nesting grounds for part of the year. Small aquatic organisms including fish and macroinvertebrates may also use the streams for life cycle processes.

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: 0.48 acres

Wetland type. Explain: Wetland Section I is a forested wetland.

Wetland quality. Explain: Wetland Section I is of moderate quality dominated primarily by a large deciduous hardwood canopy with a robust shrub/sapling stratum. Aerial imagery indicates the area of Section I has been forested since 1939 and has remained one of the last forested areas in the general vicinity of the Review Area as agricultural and residential development has expanded.

Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Hydrology for the wetland is driven by a seasonally high water table and in response to specific precipitation events throughout the year.

Surface flow is: **Overland sheetflow**

Characteristics: Aerial imagery from 2003 indicates the presence of a defined surface water connection between Wetland Section I and Eley Ditch BR #2 (Drain 1 as described in the Report). However, at the time of the site inspections, the defined surface water connection had been severed by a maintained path more thoroughly described in Section III.B.2.c below.

Subsurface flow: **Unknown**. Explain findings: The NRCS Web Soil Survey maps the area of Section I as Washtenaw silt loam; a hydric soil of Noble County. The NRCS describes the Washtenaw soil series in Noble County as susceptible to frequent ponding and indicates the seasonally high water table in this series is at or near the soil surface. A high water table was observed in the area between Eley Ditch BR #2 (Drain 1) and Wetland Section I during the December site inspection. The permeable hydric soils present along the east bank of Eley Ditch BR #2 (Drain 1) provide a conduit for water to move between Wetland Section I and Eley Ditch BR #2 (Drain 1) regardless of the path that has been maintained (with fill or clearing) for vehicle access.

Dye (or other) test performed: N/A.

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain: Aerial imagery taken around approximately 2007, indicates a maintenance path was cleared along the east bank of Eley Ditch BR #2 and has been maintained in subsequent years. At the time of the site inspections, evidence of vehicles using the path was observed. Sporadic spoil piles were observed intermittently along the path, indicating the path is used to maintain Eley Ditch BR #2. The maintained path appears to have created a separation between Wetland Section I and Eley Ditch BR #2 (Drain 1) which was not observed in aerial imagery prior to 2003. The close proximity of Wetland Section I to Eley Ditch BR #2 (Drain 1) supports connection via permeable hydric soils that allows water to mix between the two aquatic resources. 33 CFR 328.3(c) states, "wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands"". Natural or man-made barriers do not reclassify adjacent wetlands as isolated if they would otherwise be determined adjacent but for the barrier.

(d) Proximity (Relationship) to TNW

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

Project waters are **20-25** 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: At the time of the site inspections, Section I held standing water through much of its extent. The water was clear and stagnant, exhibiting a thin layer of ice across its surface during the December site

inspection. Wetland Section I appears to drain predominantly residentially developed land. Pollutants consistent with runoff from surrounding residential development such as fertilizers and sediment, as well as pollutants consistent with runoff from surrounding roads such as grease, sediment, and salt, are expected within Wetland Section I. Wetland Section I provides a measure of water quality protection to downstream waters including Eley Ditch, Little Cedar Creek, Cedar Creek, and the Maumee River (TNW) by filtering out pollutants from storm water runoff and trapping and retaining sediment.

Identify specific pollutants, if known: N/A.

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

Riparian buffer. Characteristics (type, average width): .

Vegetation type/percent cover. Explain: Wetland Section I is a forested wetland dominated primarily by *Populus deltoides*, *Ulmus americana*, and *Acer saccharinum* canopy with a robust sapling/shrub stratum of *Lindera benzoin* and *Ulmus americana*.

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: The wetland provides some measure of foraging habitat as well as cover for mammals. Waterfowl and migratory birds may also use the wetland for resting, feeding, or as breeding or nesting grounds for part of the year.

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

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

Approximately (45.03) 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>
Yes	.68	Section I (No)	.48
Yes	5.5		
Yes	25.95		
Yes	12.42		

Summarize overall biological, chemical and physical functions being performed: These wetlands are located within the relevant reach of the Review Area. Specifically, these wetlands directly abut Eley Ditch BR #1 west of the Review Area and Eley Ditch BR #2 to BR #2 east of the Review Area, and are adjacent to Eley Ditch BR #2 within the Review Area. These wetlands, along with the wetland within the Review Area, provide some ability to trap sediment, nutrients, bacteria, toxins, and help to retain flood waters before reaching the Maumee River (Section 10 TNW). The wetland identified as Section I (.48-acres), along with other wetlands located within the relevant reach, 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 migratory birds, amphibians, and pollinators. The forested wetlands produce sources of nutrients that contribute to the downstream food webs 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 and surrounding agricultural fields. The wetlands serve as retention areas for floodwaters during precipitation events and slow flow of floodwaters to downstream waterbodies. The Western Lake Erie Basin Study, Upper Maumee Watershed Assessment (April 03, 2009) stated that relatively flat topography and increased urban land use contribute to the flooding issues the Maumee River experiences. Decreasing the flood storage capacity of Section I and the other wetlands within the relevant reach would 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 wetland's chemical, physical, and biological functions would contribute to further degradation of the TNW's water quality, flood hazards, ecological integrity, and aquatic function.

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: Wetland Section I, as described in the Wetland Delineation Report (Report), is a forested wetland approximately .48-

acres in size. Wetland Section I is located east of Eley Ditch BR #2 (Drain 1 as described in the Report), which flows south through the Review Area. Water conveyed through Eley Ditch BR #2 follows the flow path described more thoroughly in Section III.D.2 of this document before entering the Maumee River (TNW). The Maumee River, a Section 10 Navigable Waterway, flows northeast and empties into Lake Erie (Section 10 Navigable Waterway). The subject wetland is located on an undeveloped portion of a parcel surrounded by residential and agricultural development in the town of Avilla, Indiana. Wetland Section I traps sediment, nutrients, bacteria, toxins, and helps to retain flood waters before reaching Eley Ditch, the Maumee River (TNW), and eventually Lake Erie (TNW). The continued degradation of wetlands situated within the Sycamore Creek-Little Cedar Creek watershed and in and around Avilla, will have a demonstrable effect on the water quality of the Maumee River. Most of the wetlands in the Maumee River watershed in Indiana are relatively small and exist as fragments or relic portions of the Great Black Swamp, which stretched from Fort Wayne, Indiana to Toledo, Ohio and was subjected to massive drainage projects in the 1800's. The drainage work facilitated the pervasive conversion of the landscape to agricultural land. Prior to drainage efforts, the Maumee River's watershed was predominantly one large, forested wetland complex with interspersed marshes. The ditches that drained the Great Black Swamp are conduits for fast drainage and provide little flood retention and little ability to filter/retain pollutants. This has led to the Maumee River being flood prone, nutrient and pollutant rich, and has resulted in the construction of a large-scale Corps flood control project located in Fort Wayne, Indiana (Rep. Mark Souder, IN, requested \$5.3 million in additional funding for additional Corps flood control work in the 2007 WRDA). Impacts to the remaining waters and wetlands in the upper Maumee River's watershed, will serve to reduce the effectiveness of the existing, as well as future, Corps flood control projects in Fort Wayne. Water quality impairments in the Maumee River watershed include PCBs, E.coli, mercury, nutrients, and turbidity per the Western Lake Erie Basin Study, Upper Maumee Watershed Assessment (April 03, 2009). These identified water quality impairments of the Maumee River (in Ohio) have led to it being designated a Great Lakes Area of Concern (AOC) and are subject to a Remedial Action Plan (RAP). In an effort to clean up the most polluted areas in the Great Lakes, the United States and Canada, in Annex 2 of the Great Lakes Water Quality Agreement, committed to cooperate with State and Provincial Governments to ensure that RAPs are developed and implemented for all designated AOCs in the Great Lakes basin. Limiting pollutants of any type in the upstream reaches of the Maumee River, which includes the Sycamore Creek-Little Cedar Creek watershed, assists in the realization of the goals of the RAP for the Maumee River AOC. Section I and the similarly situated wetlands help trap sediment, nutrients, bacteria, toxins, and help to retain flood waters before reaching the Maumee River (TNW) and ultimately Lake Erie, another Section 10 TNW.

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

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

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

2. RPWs that flow directly or indirectly into TNWs.

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Site inspections confirm that Eley Ditch BR #2 (Drain 1 as described in the Report), Old People Home BR (Drain 2 as described in the Report), and Eley Ditch BR #2 to BR #2 (Drain 3 as described in the Report), are all seasonal RPWs that exhibit Ordinary High Water Marks (OHWMs) and defined beds and banks. All three tributaries within the Review Area are identified on the USGS National Hydrography Advanced Viewer, as well as the USGS StreamStats application. Aerial imagery sourced from the Noble County Beacon GIS Viewer taken in 2003, 2017, and 2021, indicate that all three tributaries were conveying water at the time the photographs were taken. Similarly, water was observed within the channels of the three tributaries during both the November 2021 and December 2021 site inspections. Site photographs accompanying the Report indicate only Eley Ditch BR #2 to BR #2 (Drain 3) was conveying water on September 21, 2021, however, this is consistent with the state of many seasonal RPWs during the Dry Season.

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

- Tributary waters: **1,688** linear feet **2-12** width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

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).

⁸See Footnote # 3.

- 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: .
- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: 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: **0.48** 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: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

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

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

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

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

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

- 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: 0.52 acres. List type of aquatic resource: Stormwater detention basin.
- 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 - Orchard Valley" prepared by Earth Source, Inc., on behalf of Granite Ridge Builders, dated October 06, 2021 and revised February 25, 2022.
- 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: USGS National Hydrography Dataset - The National Map Advanced Viewer.
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000, IN-Garrett.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey, Noble County.
- National wetlands inventory map(s). Cite name: USFWS Online Wetlands Mapper (NWI).
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): National Regulatory Viewer - Great Lakes and Ohio River Division Imagery, 1998, 2005, 2007, 2012, and 2018; Noble County Beacon GIS Viewer Imagery, 2003, 2017, and 2021; Indiana University Bloomington IHAPI Imagery for Noble County, 1951, 1957, and 1973; Google Earth Aerial Imagery 1998 and 2005.
 - or Other (Name & Date): Site Photographs, Appendix B "Site Photographs" of the Wetland Delineation Report, September 21, 2021; Site Inspection Photographs, November 02, 2021, and December 09, 2021.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: Upper Maumee River Watershed Management Plan HUC 04100005, December 05, 2014; Western Lake Erie Basin Study, Upper Maumee Watershed Assessment, April 03, 2009.
- Other information (please specify): Site Inspection Report in Case File, November 02, 2021, and December 09, 2021; Noble County Beacon GIS Viewer; National Regulatory Viewer - Great Lakes and Ohio River Division 3DEP Hillshade and 3DEM Digital Elevation Model (DEM); USGS StreamStats Application; An annual Climatological Report of Fort Wayne, Indiana was sourced from the National Weather Service Forecast Office - Northern Indiana to determine average annual rainfall and snowfall of the area.

B. ADDITIONAL COMMENTS TO SUPPORT JD: Eley Ditch BR #2 (Drain 1), Old People Home BR (Drain 2), and Eley Ditch BR #2 to BR #2 (Drain 3), are all seasonal RPWs that exhibit Ordinary High Water Marks (OHWMs) and defined beds and banks. All three resources are identified on the USGS National Hydrography Dataset as Streams/Rivers and water was observed flowing within each channel at the time of the site inspections. In addition, water is observed within each channel in aerial imagery from 2003 and 2021. Through a series of sub-surface tiles identified using the Noble County Beacon GIS Viewer, the three tributaries converge and discharge into Eley Ditch BR #2 approximately 90' west of the Review Area. Eley Ditch BR #2 flows west approximately 350' to its confluence with Eley Ditch BR #1 to form Eley Ditch. Eley Ditch flows south approximately 2.13 miles to its confluence with M. Good Ditch to form Davis Ditch. Davis

Ditch flows approximately 3.14 miles south (changing names to Freeman Ditch along the way) to its confluence with Little Cedar Creek. Little Cedar Creek flows approximately 8.93 miles in a general southerly direction to its confluence with Cedar Creek west of Coldwater Road in Allen County, Indiana. Cedar Creek flows approximately 11.01 miles in a general southeast direction to its confluence with the St. Joseph River. The St. Joseph River flows approximately 13.6 miles in a general southwest direction to its confluence with the St. Mary's River to form the Maumee River (TNW) in Fort Wayne, Indiana. Therefore, Eley Ditch BR #2 (Drain 1), Old People Home BR (Drain 2), and Eley Ditch BR#2 to BR #2 (Drain 3), are RPWs within the tributary system of the Maumee River and are Waters of the United States. Section I is a forested wetland that is adjacent to a seasonal RPW (Eley Ditch BR #2) within the tributary system of the Maumee River (TNW) and is a Water of the United States.