#### 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 REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 29,2022 DISTRICT OFFICE, FILE NAME, AND NUMBER: Detroit, Warsaw Property, 2021-01164-143 C. PROJECT LOCATION AND BACKGROUND INFORMATION: State: Indiana County/parish/borough: Kosciusko City: Warsaw Center coordinates of site (lat/long in degree decimal format): Lat. 41.208490° N, Long. -85.864032° W. Universal Transverse Mercator: Name of nearest waterbody: Walnut Creek Name of nearest Traditional Navigable Water (TNW) Into which the aquatic resource flows: Wabash River Name of watershed or Hydrologic Unit Code (HUC): 05120106 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: February 17, 2022 Field Determination. Date(s): February 1, 2022 **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. 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 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: linear feet: width (ft) and/or acres. Wetlands: 0.23 acres. c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

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

Elevation of established OHWM (if known):

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: The project consists of four non-jurisdictional waters. Two wetlands Section I and III are, palustrine emergent, depressional wetlands totaling 0.16 acres and three linear features totaling 451 linear feet. The two wetlands

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

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

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

identified as Section I - is 0.02 acres and Section III - 0.14 acres (Section III is part of a larger wetland complex that continues east out of the review area). Hydrology for each wetland is driven by precipitation in the form of rainfall, snowmelt, and surface runoff from the surrounding agricultural field and residential development. During the site inspection no connection to a surface water outlet for the two wetlands was observed. Review of the USGS Map did not indicate the presence of surface water (i.e RPW TNW, lake) in the vicinity of the wetlands, the closest mapped RPW (Walnut Creek) is located 0.21 miles west of the review area. Section I and III do not abut a surface water due to the depressional nature of the wetlands and distance to the closest RPW. Review of the county drainage maps obtained from the Beacon GIS website did not indicate the presence of a subsurface connection and no sign of a subsurface drain (i.e. standpipe) was observed during the site visit that could carry water from the two wetlands to another surface water. Section I and III are not separated by a berm or other man-made structure from a surface water due to their landscape position and distance to the closest mapped RPW (Walnut Creek), this is based on the site visit and review of resource maps. The depressional wetlands do not provide for interstate or foreign commerce since they are not subject to commercial use and are not susceptible for commercial use in the future. In addition, there is no evidence that that the wetlands support recreational use nor is there any evidence to support the wetlands are used for fish or shellfish production that are taken or sold for interstate or foreign commerce. Additionally, there are no known species that would require Section I or III to fulfill its life cycle requirements. In addition, given the distance and multiple observed barriers (railroad tracks and State Highway) movement from the wetlands to the closest surface water for life cycle requirements is unlikely to occur. See Section IV.B for additional information.

The three linear features are identified as Drain 1 - 139 feet, Drain 2 - 60 feet, and Drain 3 - 252 feet. All three drains are erosional features with infrequent, short duration flows that occur due to a specific precipitation event. Hydrology for each linear feature is driven by precipitation in the form of rainfall, snowmelt, and surface runoff from the surrounding agricultural field and residential development. Further based on the site visit, a hydrologic surface or subsurface route (i.e., though a subsurface tile) was observed that would allow Drain 1, 2, and 3 to contribute surface water flow to a downstream TNW. This was supported by review of the county drainage maps obtained from the Beacon GIS website which did not indicate the presence of a subsurface connection. Based on the site visit and applicable resource maps, Drains 1, 2, and 3 do not contribute flow to a downstream TNW and are non-juisdictional features. See Section IV.B for additional information.

#### **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: **Pick List** Drainage area: Pick List Average annual rainfall: inches Average annual snowfall: inches (ii) Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. Tributary flows through 2 tributaries before entering TNW. Project waters are **Pick List** river miles from TNW. Project waters are **Pick List** river miles from RPW. Project waters are **Pick List** aerial (straight) miles from TNW. Project waters are Pick List aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Identify flow route to TNW5: Tributary stream order, if known:

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

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

(b)	General Tributary Characteristics (check all that apply):  Tributary is:  Natural
	☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	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:  Presence of run/riffle/pool complexes. Explain:  Tributary geometry: Pick List  Tributary gradient (approximate average slope): %
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:
	Surface flow is: Pick List. 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 destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment deposition destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment deposition destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting scour multiple observed or predicted flow events abrupt change in plant community other (list):
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):    High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: tify specific pollutants, if known:

(iii)

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

<sup>7</sup>Ibid.

(iv) Bio	logical Characteristics. Channel supports (check all that apply):  Riparian corridor. Characteristics (type, average width):
H	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:
2. Charact	teristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	ysical Characteristics:
(a)	General Wetland Characteristics:
	Properties: Wetland size:0.23acres
	Wetland type. Explain:Plasturine, Emergent.
	Wetland quality. Explain: Fair to low. Section II is located in an active agriculatural field and has been subject to
cropping and	agriculatural activities. The agricultural work has removed the majority of the wetland vegeation.  Project wetlands cross or serve as state boundaries. Explain:
	Troject wettands cross of sorve as state countaines. Explain.
(b)	General Flow Relationship with Non-TNW:
spring during	Flow is: <b>Ephemeral flow</b> . Explain: Flow from Section II to Walnut Creek will occur during wet periods such as early snowmelt or in response to a precipirtaion event.
spring waring	<u> </u>
	Surface flow is: Not present
	Characteristics: .
	Subsurface flow: Yes. Explain findings: A tile standpipe is located within the wetland boundary, water flows through the
subsurface til	e and discharges into Walnut Creek.
	Dye (or other) test performed:
(c)	Wetland Adjacency Determination with Non-TNW:
	Directly abutting
	<ul> <li>☑ Not directly abutting</li> <li>☑ Discrete wetland hydrologic connection. Explain: Water from Section II flows into a tile that discharges into</li> </ul>
Walnut Creek	 
	Ecological connection. Explain:
	Separated by berm/barrier. Explain:
(d)	Proximity (Relationship) to TNW
	Project wetlands are 30 (or more) river miles from TNW.
	Project waters are <b>30 (or more)</b> aerial (straight) miles from TNW. Flow is from: <b>Wetland to navigable waters.</b>
	Estimate approximate location of wetland as within the 500-year or greater floodplain.
(II) GI	
` '	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
Cin	characteristics; etc.). Explain: Water was not present at the time of the site visit.
	ntify specific pollutants, if known: Runoff from the surronding agricultural area will contain chemicals and pollutants
associated wi	th farming operations. This can include but not limited to pesticides, nitrogen, phosphates, and sediment.
(iii) Bio	logical Characteristics. Wetland supports (check all that apply):
	Riparian buffer. Characteristics (type, average width):
Glycine soja-	Vegetation type/percent cover. Explain:Barbarea vulgaris-20%,Persicaria pensylvanica-15%, Cyperus strigosus-15%,
	Habitat for:
_	Federally Listed species. Explain findings:
	Fish/spawn areas. Explain findings:  Other environmentally consisting appairs. Findings:
	☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
	teristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: 4
Ap	proximately (106) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland 1 (Y)	45		
Wetland 2 (Y)	60		
Wetland 3 (Y)	0.76		
Section II (N)	0.23		

Summarize overall biological, chemical and physical functions being performed: Section II and the other similarly situated wetlands within the relevant reach perform biological, chemical, and physical functions which influence the integrity of downstream waters, including the Wabash River, a TNW. The NRCS Raid Watershed Assessment (2007) stated that approximately 24% of the 2,209 miles of streams in the Tippecanoe Watershed are impaired. Identified impairments include sedimentation, pesticides and fertilizers, E. coli, dissolved oxygen, nutrients, and impaired biotic community. The wetlands retain and filter surface waters to improve water quality downstream by settling and adsorbing particulates, such as sediment and potential contaminants, like phosphates and nitrates received from the drainage of the surrounding residential and agricultural areas. In addition, Tippecanoe River Watershed Action Stagey (2001) referenced a publication titled "Rivers of Life: Critical Watersheds for Protecting Freshwater Biodiveristy." This publication ranked the Tippecanoe River has the 8th most important freshwater site in North America for protection of imperiled aquatic life. Section II and the similarly situated wetland's ability to trap pollutants and sequester sediment will improve downstream water quality and increase the survivability of the federally endangered mussels found in the Tippecanoe River and improve the water quality of the downstream waters including the Wabash River, a TNW. Per the Army Corp of Engineers Wabash River Study (2011), the numerous flooding events were cited to support the construction of Army Corp lakes located within the Wabash River Watershed. The hydrologic conditions of the Wabash River watershed (including the Tippecanoe River) has been modified to such an extent that water flows have increased. This increase in hydrologic flow is the major cause of the flooding events that occur within in the watershed. The Army Corp lakes were constructed in response to this hydrologic change has a way to reduce flow to control flooding. The subject wetland and the similarly situated wetlands serve as retention areas for floodwaters during precipitation events and slow flow of floodwaters to downstream waterbodies which include Walnut Creek, the Tippecanoe River and the Wabash River, a TNW.

#### 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: Water flows from Section II into Walnut Creek which discharged into the Tippecanoe River. Walnut Creek and the

Tippecanoe River are part of the major basin of the Wabash River, since it ultimately flows into the Wabash River, a TNW. Section II and the similarly situated wetlands are located in a mixed setting that included both urban and agricultural areas. Section II and the similarly situated wetland will trap and filter sediment, retain and attenuate flood waters, provide runoff storage and trap and sequester pollutants. The NRCS Raid Watershed Assessment (2007) stated that approximately 24% of the 2,209 miles of streams in the Tippecanoe Watershed are impaired. Identified impairments include sedimentation, pesticides and fertilizers, E. coli, dissolved oxygen, nutrients, and impaired biotic community. According to the Tippecanoe Watershed Management Plan (2006) the impairments to water quality are the result of extensive changes to the landscape that has occurred over time. Before settlement began, the watershed was dominated by oak-hickory forests and wetlands that existed has either pothole lakes or marshes or large forested wetland and marsh complexes. Over time the landscape was altered by channelizing ditches, streams, and lakes along with the draining of wetlands to accommodate agricultural production and development. This makes waterways more susceptible to increased erosion, increases the pollutant load to downstream waters, negatively impacts aquatic life, and decreases the ability to retain flood waters. Approximately 75% of the watershed is in agricultural production and the state of Indiana has lost roughly 85% of state wetlands with some of the greatest losses occurring in Kosciusko, Noble, and Whitley Counties. The Indiana Department of Environmental Management e303d website (https://www.in.gov/idem/nps/pages/e303d/index.html) lists potions of both Walnut Creek and the Tippecanoe River has being impaired for E.coli, mercury, and PCP. The subject wetland Section II along with the similarly situated wetlands will retain stormwater runoff which will allow sediment to be trapped and filtered out along with any pollutants contained in the runoff before the water is slowly released to downstream waters. The subject wetland together with the similarly situated wetlands and remaining wetlands in the watershed play a significant role in mitigating effects on the chemical and physical integrity of Walnut Creek, the Tippecanoe River and the Wabash River, a TNW by trapping and filtering sediment and pollutants. Within the Tippecanoe and Wabash River watersheds major flooding events have occurred. In the Army Corp of Engineers Wabash River Study (2011), the report cited these flooding events to support the construction of Army Corp lakes located within the Wabash River Watershed. The hydrologic conditions of the Wabash River watershed (including the Tippecanoe River) has been modified to such an extent that water flows have increased. This increase in hydrologic flow is the major cause of the flooding events that occur within in the watershed. The Army Corp lakes were constructed in response to this hydrologic change has a way to reduce flow to control flooding. The subject wetland Section II and the similarly situated wetlands help to mitigate flooding to downstream areas alongWalnut Creek, the Tippecanoe River and the Wabash River(TNW) by retaining and attenuating flood waters. The Tippecanoe River Watershed Action Stagey (2001) referenced a publication titled "Rivers of Life: Critical Watersheds for Protecting Freshwater Biodiveristy." This publication ranked the Tippecanoe River has the 8th most important freshwater site in North America for protection of imperiled aquatic life. Within the Tippecanoe River, six species of endangered mussels are present along with one threatened species. The U.S. Fish and Wildlife Service (USFWS) list the six endangered species has: Clubshell (Pleurobema clava), Fanshell (Cyprogenia stegaria), Northern riffleshell (Epioblasma torulosa rangiana), Rayed bean (Villosa fabalis), Sheepnose (Plethobasus cyphyus), and Snuffbox (Epioblasma triquetra). The USFWS lists many causes for the listing of the six species, but water quality issues was one common cause for all the identified species. Identified water quality issues include increased sedimentation and chemical runoff from agricultural runoff and industrial wastes. The increased sedimentation clogs the gill of the mussels or buries them completely ultimately killing them. Since mussels are filter feeders, toxins found in the chemical runoff build up in the body of the mussels ultimately poisoning it to death. Section II and the similarly situated wetlands ability to trap pollutants and sequester sediment will improve downstream water quality and increase the survivability of the federally endangered mussels and improve the water quality of the downstream TNW, the Wabash River.

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

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.
DDWs that flow discatly or indirectly into TNWs
RPWs that flow directly or indirectly into TNWs.
Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that
tributary is perennial:
Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .

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:  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 jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: Section II 0.23 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.	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).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain:  Other factors. Explain:
Ide	entify water body and summarize rationale supporting determination:
Pro	ovide 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: .

E.

<sup>&</sup>lt;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.

	☐ 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): See Section IV.B.
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource: .  Wetlands: 0.16 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.
SEC	CTION 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 titled "Warsaw Property" dated August 16, 2021.  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:
	<ul> <li>U.S. Geological Survey Hydrologic Atlas: Data obtained from the Corps National Regulatory GIS Viewer.</li> <li>□ USGS NHD data.</li> <li>□ USGS 8 and 12 digit HUC maps.</li> <li>□ U.S. Geological Survey map(s). Cite scale &amp; quad name:1:24000 Warsaw Quad.</li> <li>□ USDA Natural Resources Conservation Service Soil Survey. Citation:USDA-NRCS Soil Survey for Kosciusko County.</li> <li>□ National wetlands inventory map(s). Cite name:FWS On-Line Viewer.</li> </ul>
	State/Local wetland inventory map(s):  FEMA/FIRM maps:  100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)  Photographs:  Aerial (Name & Date): 1998 DOQQ Aerail, 2005 Indiana Aerial (National Regulatory Viewer), 2007 NAIP, 2011 aerial obtained from Beacon, 2016 Indiana Aerial (National Regulatory Viewer), 2016 aerial obtained from Beacon, 2018 NAIP, and 2021 aerial obtained from Beacon.  or ☐ Other (Name & Date):
	Previous determination(s). File no. and date of response letter:  Applicable/supporting case law:  Applicable/supporting scientific literature: The Indiana Department of Environmental Management e303d website (https://www.in.gov/idem/nps/pages/e303d/index.html), Army Corp of Engineers Wabash River Study (2011), NRCS Tippecanoe Raid Watershed Assessment (2007), Tippecanoe Watershed Management Plan (2006), Tippecanoe River Watershed Action Stagey (2001).  Other information (please specify):1957 USGS 1:24000 Warsaw Quad Map and Kosciusko County Drainage Map obtaiend from Beacon.

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

Aerial signatures in the form of a channelized feature for Drain 1 and 2 were not observed in the following aerial photographs; 1998, 2005, 2007 NAIP, 2011, 2016 (National Regulatory Viewer), and the 2016 (Beacon) aerials. In the 2018 NAIP photo there are breaks in the crop coverage were Drain 1 and 2 are located, but no channel feature was observed in the aerial. In the 2021 Beacon aerial, Drain 1 and 2 can be

observed, a channel feature is present. A channel feature is also present in the March 2021 Beacon aerial for both Drain 1 and 2. However, in the 2021 photos a dark aerial signature that could indicate water is not observed within the channel of Drain 1 or 2. During the site visit, no water was observed within the channel of both Drain 1 and Drain 2 and no OHWM indicators were observed that could indicate flow. Additionally, no flow path was observed during the site visit, out of the review area that would allow Drain 1 or 2 to contribute flow to a downstream TNW. This is supported by review of the USGS topo map, NRCS soil Survey, Kosciusko County Drainage map and the National Hydrography Dataset (NHD). The USGS topo does not indicate a channel/tributary where Drain 1 or 2 are located either in or outside of the review area. The NRCS Soil Survey also does not map a waterbody or waterbodies in the general location of the drains and the Kosciusko County Drainage map does not show any county regulated drainage features in the general location of Drains 1 and 2. Both soil survey and drainage map do not indicate that a channel continues offsite for each drain that could connect them to a downstream TNW. Both Drain 1 and Drain 2 and non-jurisdictional features due to their lack of a connection to a downstream TNW and lack of the required flow regime.

Aerial signatures in the form of a linear, channelized feature for Drain 3 were not observed in the following aerial photographs; 1998, 2005, 2007 NAIP, and 2011, 2016 (National Regulatory Viewer). In the 2018 NAIP photo there are breaks in the crop coverage were Drain 3 is located, but no channel feature was observed in the aerial. In the 2016 (National Regulatory Viewer), 2016 (Beacon) and 2021 (Beacon) aerials, a linear, channel like feature can be observed. Drain 3 is also present in the March 2021 Beacon aerial. However, in both of the 2016 aerials and 2021 aerials a dark aerial signature is observed that could indicate water within the channel of Drain 3. During the site visit, no water was observed within the channel and no OHWM indicators were observed that could indicate flow. The NHD did indicate a potential flow path that starts at Wetland Section III, traverses the review area, then exits the review area in the southwest corner, ultimately discharging into Walnut Creek. During the site visit the flow path indicated by the NHD was not observed. No flow path was observed during the site visit, out of the review area that would allow Drain 3 to contribute flow to a downstream TNW. This is supported by review of the USGS topo map, NRCS soil Survey, and Kosciusko County Drainage map. The USGS topo does not indicate a channel/tributary where Drain 3 is located either in or outside of the review area. The NRCS soil Survey also does not map a waterbody in the general location of Drain 3 and the Kosciusko County Drainage map does not show any county regulated drainage features in the general location of Drain 3, and both do not indicate that a channel continues offsite for each drain that could connect Drain 3 to a downstream TNW. Drain 3 is a non-jurisdictional feature due to its lack of a connection to a downstream TNW and lack of the required flow regime.

During the site inspection no connection to surface water outlets for the wetlands identified as Section I and III was observed. Review of the USGS Map did not indicate the presence of surface water (RPW, non-RPW or TNW) in the vicinity of the wetlands, the closest mapped RPW (Walnut Creek) is located 0.21 miles west of the review area. Review of the Kosciusko County Drainage Map obtained from the Beacon GIS website did not indicate the presence of a subsurface connection and no sign of a subsurface drain (i.e. standpipe) was observed during the site visit that could carry water from the three wetlands to another surface water. The NHD map did indicate a potential flow path that originated near Wetland Section III, ran through Section II, and exited out of the review area in the southwest corner, near Section I, ultimately discharging into Walnut Creek. During the site visit this flow path was not observed. The NHD map was the only resource map that indicated this potential flow path, the USGS Map, NRCS Soil Survey and the aerials from 1998, 2005, 2007, 2011, 2016, 2018, and 2021 do indicate the flow path is present connecting Section I and III to a downstream RPW. Section I and III are not separated by a berm or other man-made structure from a surface water due to their landscape position and distance to the closest mapped RPW (Walnut Creek), this is based on the site visit and supported by review of the resource maps. The depressional wetlands do not provide for interstate or foreign commerce since they are not subject to commercial use and are not susceptible for commercial use in the future. In addition, there is no evidence that that the wetlands support recreational use nor is there any evidence to support the wetlands are used for fish or shellfish production that are taken or sold for interstate or foreign commerce. Additionally, there are no known species that would require Section I or III to fulfill its life cycle requirements. In addition, given the distance and multiple observed barriers in the aerials from 1998, 2005, 2007, 2011, 2016, 2018, and 2021 (railroad tracks and State Highway) movement from the wetlands to the closest surface water for life cycle requirements is unlikely to occur.