

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):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Huntington District, LRH-2013-981-GMR-RR1-int-RPW-Stream 1-abutting Wetland 2-Adjacent Wetland 1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Ohio County/parish/borough: Butler City: West Chester

Center coordinates of site (lat/long in degree decimal format): Lat. 39.36909 ° N, Long. -84.37428° W.

Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Unnamed Tributary to unnamed tributary to Gregory Creek

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

Name of watershed or Hydrologic Unit Code (HUC): Lower Great Miami 05080002

☒ 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: 17 December 2013

☒ Field Determination. Date(s): 27 November 2013

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):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: 267 linear feet: 4 width (ft) and/or acres.

Wetlands: 1.35 acres.

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).

c. Limits (boundaries) of jurisdiction based on: **Established by OHWM.**
Elevation of established OHWM (if known): .

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: A stormwater detention basin (SW 1) was constructed within the delineation boundary in 2005. The stormwater detention basin SW 1 was constructed per the Butler County subdivision regulations for the Preserve at Wetherington residential subdivision. The stormwater detention basin SW 1 was designed to reduce the 50-year post-development peak rate of runoff to the 10-year pre-development rate. The stormwater detention basin SW 1 only retains water during a 50-year 24-hour storm event. The stormwater detention basin was constructed in-stream (Stream 1), and two concrete channels (350 feet and 125 feet) retain the normal intermittent flow of water through the stormwater detention basin SW 1. Due to the design criteria of the basin, it rarely detains water and does not restrict the normal intermittent flow of water. There is a natural headwater intermittent stream (headwaters of Stream 1) above the stormwater detention basin SW 1, a stormwater retention pond (Pond 1, 0.05 acre) that discharges into the stormwater detention basin SW 1 through an elevated intake, and a 1.31-acre wetland (Wetland 1, 1.31 acres) that discharges through culverts and into the stormwater detention basin. Pond 1 and Wetland 1 discharge directly into the stormwater detention basin through a series of culverts. Pond 1 would be considered non-jurisdictional because it was constructed in uplands for stormwater retention and aesthetics. Wetland 1 would be considered adjacent to RR1 (see below for additional information). Since the stormwater detention basin was constructed in-stream, it serves as the hydrologic connection of the intermittent headwaters of Stream 1 and Wetland 1 to the downstream RR1. However, the stormwater detention basin SW 1 was constructed to fulfill the requirements for waste water treatment pursuant to the Clean Water Act, and the stormwater detention basin SW 1 would be considered non-jurisdictional for Section 404 of the Clean Water Act. If the use of the stormwater detention basin SW 1 changes, the non-jurisdictional determination may not be applicable.

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: _____

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 waters⁴ (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: 1,390 square miles

Drainage area: ~100 acres

Average annual rainfall: 43.36 inches

Average annual snowfall: 22.1 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 2 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

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

Project waters are 1 (or less) river miles from RPW.
Project waters are 5-10 aerial (straight) miles from TNW.
Project waters are 1 (or less) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: No.

Identify flow route to TNW⁵: RR1 (Stream 1) within the delineation boundary originates at a stormwater detention basin SW 1 and flows northwest for approximately 275 feet and flows into a culvert under Liberty Way. On the north side of Liberty Way the culvert discharges to a rip-rap lined channel that flows west along the road then through a residential area and eventually into an unnamed tributary (UT) to Gregory Creek. The UT Gregory Creek flows north and west to Gregory Creek. Gregory Creek flows north and discharges directly into the Great Miami River.
Tributary stream order, if known: 1st.

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

Tributary is:

☒ Natural

☒ Artificial (man-made). Explain: See below.

☒ Manipulated (man-altered). Explain: RR1 has an approximate 100-acre watershed

that is highly manipulated. The watershed consists of a residential subdivision and a golf course. The only undeveloped portion of the watershed is the 37-acre delineation boundary, but this area has been historically altered by agriculture and more recently by fill, grading, and hydrologic manipulation due to residential development and road improvements on Liberty Way and the construction of Tylers Place Blvd. The headwaters of Stream 1, outside of the delineation boundary, have been channelized and the stream is located in residential lawns. Starting in the headwaters, Stream 1 flows north and into a culvert under Preserve Place. The culvert discharges into the stormwater detention basin SW 1 described above within the delineation boundary. The stormwater detention basin SW 1 does not retain water or restrict the flow of water under normal circumstances and the water from Stream 1 flows within a concrete channel in the stormwater basin. Water within the stormwater detention basin SW 1 enters a culvert and discharges into RR1. RR1 flows north and into another culvert under Liberty Way and outside of the delineation boundary.

Wetland 1 is located in a depression on an undeveloped parcel east of Tylers Place Blvd. Under normal conditions, the wetland flows through the northern culvert under Tylers Place Blvd. The culvert flows west and discharges into the concrete lined channel within the stormwater detention basin SW 1. The wetland flows through the southern culvert under Tylers Place Blvd. during wet weather and into the stormwater retention pond (Pond 1).

Pond 1 was excavated from uplands and is a stormwater retention pond. Pond 1 receives water during wet weather from Wetland 1 and from storm sewers located on Tyler Place Blvd. Pond 1 has an elevated intake structure that would discharge during wet weather into the concrete lined channel within the stormwater detention basin SW 1.

Based on a review of the historical images, prior to residential development and the construction of roads, the area was in agricultural use. An aerial image from 1994 and 2004 (Google Earth) clearly demonstrates the presence of a stream channel in the undeveloped area of the delineation boundary. After 2005, aerial images show the construction of the residential homes and stormwater detention basin SW 1. The Butler County Soil Survey (USDA, 1980) depicted an intermittent stream in the present location of Stream 1 and the stormwater retention basin SW 1, and an additional small intermittent tributary that would have been in the present location of Preserve Place, Tylers Place Blvd, and Wetland 1. The uppermost reach of the unnamed tributary mapped on the soil survey appears to flow alongside the southern portion of Liberty Way, which is where the "tail" of Wetland 1 was mapped in the JD report in the north east portion of the delineation boundary. During the Corps' site visit (27 November 2013) water was visibly flowing in the "tail" location towards the interior of the wetland and through the northern culvert under Tylers Place Blvd and then discharging into the stormwater detention basin SW 1.

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

Average width: 4 feet

Average depth: .5 feet

Average side slopes: 3:1.

Primary tributary substrate composition (check all that apply):

☒ Silts

☒ Cobbles

☒ Sands

☒ Gravel

☒ Concrete

☐ Muck

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.

- ☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Bed and banks appear stable.
 Likely flashy due to urbanization in the watershed with some exposed roots along stream banks.

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

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 1-2 %

(c) Flow:

Tributary provides for: **Seasonal flow**

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

Describe flow regime: The applicant identified the flow as intermittent. The stream had flowing water during the consultant's site visit in September 2013. The reach appears on the USGS topographic maps and the Butler County Soil Survey as intermittent. The stream was flowing during the Corps' 27 November 2013 site visit. The reach has a 0.04-acre abutting wetland (Wetland 2). The watershed above the reach is approximately 100 acres.

Other information on duration and volume: See above. The duration of flow is likely shorter and the volume is likely higher than a natural stream in an unaltered watershed due to urbanization and storm water input in this watershed. The in-stream stormwater detention basin SW 1 only detains water during a 50-year 24-hour event and does not restrict the normal flow of water from the headwaters.

Surface flow is: **Discrete and confined**. Characteristics: Defined bed and bank and connection to the tributary system.

Subsurface flow: **Unknown**. Explain findings: .

☐ 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

☒ the presence of litter and debris

☒ destruction of terrestrial vegetation

☒ the presence of wrack line

☒ sediment sorting

☐ scour

☒ multiple observed or predicted flow events

☐ water staining

☐ abrupt change in

plant community

☐ other (list):

☒ Discontinuous OHWM.⁷ Explain: As previously described, the stormwater detention basin SW 1 was constructed in-stream in 2005 for stormwater management purposes. The stormwater detention basin SW 1 does not restrict the normal intermittent flow of water from the headwater portions of Stream 1 to the tributary. The stream is confined to a concrete channel within the stormwater detention basin SW 1.

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:**

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.

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

Identify specific pollutants, if known: Unknown.

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

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☒ Wetland fringe. Characteristics: Wetland 2 abuts RR1 near the discharge culvert from the stormwater detention basin SW 1.
- ☐ Habitat for:
- ☐ Federally Listed species. Explain findings: .
 - ☐ Fish/spawn areas. Explain findings: .
 - ☐ Other environmentally-sensitive species. Explain findings: .
 - ☐ Aquatic/wildlife diversity. Explain findings: .

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: Wetland 1 - 1.31 acres

Wetland type. Explain: PEM.

Wetland quality. Explain: Category 1 wetland according to the Ohio Rapid Assessment Method indicating a low-quality wetland with a moderate amount of invasive species present.

Project wetlands cross or serve as state boundaries. Explain: No.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Wetland 1 is in a depressional area where a former intermittent stream channel may have been present as depicted on the soil survey. The wetland formed within the present boundaries due to the construction of Tylers Place Blvd. and the expansion of Liberty Way.

Surface flow is: **Discrete and confined**

Characteristics: Wetland 1 flows from northeast to southwest and through a culvert located under Tylers Place Blvd and into the stormwater detention basin SW 1.

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☒ Not directly abutting

☒ Discrete wetland hydrologic connection. Explain: Wetland 1 flows from northeast to southwest and through a culvert located under Tylers Place Blvd and into the stormwater detention basin SW 1.

☐ Ecological connection. Explain: .

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **5-10** aerial (straight) miles from TNW.

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

Estimate approximate location of wetland as within the **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: Water color is clear with unknown water quality. The wetland receives water from precipitation and run-off from Liberty Way. Historically, an intermittent stream was depicted on the soil survey map in the current location of the wetland so there may be a source of groundwater for the wetland.

Identify specific pollutants, if known: unknown.

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

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☒ Vegetation type/percent cover. Explain: The wetland is dominated by narrow-leaf cat-tail (*Typha angustifolia*) and blunt spike-rush (*Eleocharis obtusa*).

- ☐ Habitat for:
 - ☐ Federally Listed species. Explain findings: .
 - ☐ Fish/spawn areas. Explain findings: .
 - ☐ Other environmentally-sensitive species. Explain findings: .
 - ☐ Aquatic/wildlife diversity. Explain findings: .

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

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

Approximately (1.35) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland 1, does not directly abut,	1.31 acres	.	Wetland 2, directly abuts Stream 1, 0.04 acres

Summarize overall biological, chemical and physical functions being performed: The wetlands are storing and transforming organic and inorganic nutrients that flow to downstream TNWs. The wetland reduces the magnitude, frequency, timing, and/or duration of flow in this highly developed watershed. The wetlands receive run-off from heavily traveled roads and would retain and transform salts and pollutants and reduce their transportation to downstream waters. The wetlands would provide some habitat for aquatic organisms.

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 1 is connected to RR1 and the tributary system through a series of culverts. Wetland 2 is directly abutting RR1. The wetlands have the capacity to provide habitat, store and transform organic carbon for the aquatic ecosystem and provide flood retention. Also, the wetlands likely reduce nutrient and chemical runoff from adjacent roads and residential homes from reaching the tributary system by storing and transforming these components. RR1 in combination with an abutting wetland and an adjacent wetland, have the

capacity to provide the following functions to downstream tributaries and the downstream TNW: store and transform organic carbon and inorganic compounds, decrease sediment loading, and contribute the hydrologic characteristics of a natural headwater stream to downstream waters including the magnitude, frequency, timing, and/or duration of flow. Therefore, this reach along with the wetlands significantly affects the chemical, physical, and biological integrity of downstream TNWs. Wetland 1 and Wetland 2 have a significant nexus to a TNW and are jurisdictional.

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: The consultant, Cardno JFNW, identified the stream as intermittent and it had flowing water in September 2013. The reach is found in natural crenulations in the topography and the stream is mapped on the USGS topographic map and the Butler County Soil Survey as an intermittent tributary. The watershed has become very urbanized which typically leads to decreased infiltration and increased run-off in receiving streams. This reach would experience higher flows for shorter duration due to the developments in the watershed and the fact that the local roadways discharge through stormwater culverts into the stream. The reach has the capacity to retain and reduce peak flows, reduce sediments and other pollutants from reaching the downstream TNWs. The riparian area is narrow and would provide limited nutrient and organic matter input to the tributary system for geochemical processes. This reach is determined to have a significant nexus with the TNW, and is waters of the US.

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

- ☒ Tributary waters: 267 linear feet 4 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).
☐ 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: **RR1 flows through Wetland 2 and the wetland is within the ordinary high water mark of the stream.**

⁸See Footnote # 3.

- ☐ 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: **Wetland 2 - 0.04 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: **Wetland 1 - 1.31 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):

- ☐ 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.

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.

- ☐ 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): **As explained above, the stormwater detention basin SW 1 was constructed in-stream in 2005. The stormwater detention basin was constructed pursuant to stormwater management rules and regulations to meet the requirements of the Clean Water Act. Therefore, the two concrete lined channels (350 feet and 125 feet) within the stormwater detention basin SW 1 are non-jurisdictional. However, the concrete lined channel within the stormwater basin does serve as the hydrologic connection for Wetland 1 and the headwaters of Stream 1 to the tributary system.**

Pond 1 is a stormwater retention pond constructed pursuant to stormwater management rules and regulations to meet the requirements of the Clean Water Act. It was also likely constructed as a retaining pond for aesthetic purposes. Since Pond 1 was constructed in uplands for stormwater retention and aesthetics it is non-jurisdictional.

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): **Two concrete lined channels - 475 linear feet 3 width (ft).**
- ☒ Lakes/ponds: Pond 1 - 0.05 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: In the PCN dated 7 October 2013 titled Nationwide Permit (NWP 39) Application and Pre-Construction Notification (PCN) Proposed Liberty South Development.
- ☒ 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 NHD data.
- ☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: Mason, 1:24,000.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey for Butler County, Ohio, 1980.
- ☒ National wetlands inventory map(s). Cite name: USFWS NWI Mapper.
- ☐ State/Local wetland inventory map(s): _____
- ☐ FEMA/FIRM maps: _____
- ☐ 100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Google Earth historic aerial images from 2000-2013.
or ☐ Other (Name & Date): _____
- ☐ Previous determination(s). File no. and date of response letter: _____
- ☐ Applicable/supporting case law: _____
- ☐ Applicable/supporting scientific literature: _____
- ☒ Other information (please specify): The delineation report submitted within the PCN described Wetland 1 as isolated and did not provide sufficient information to describe the stormwater detention basin SW 1 or Pond 1. Based on the Corps site visit and additional information received 6 December 2013 from Cardno JFNew, Wetland 1 was determined to be

connected to the tributary system, stormwater detention basin SW 1 was determined to be a stormwater management structure and it serves as the hydrologic connection to the tributary system for a headwater intermittent stream and Wetland 1, and Pond 2 was determined to be a retention pond constructed from uplands for stormwater management and to serve an aesthetic purpose.

B. ADDITIONAL COMMENTS TO SUPPORT JD: This jurisdictional determination form is only for the area identified on the attached map as Stream 1 (RR1), Wetland 2, Wetland 1, Stormwater Retention Pond 1, and Stormwater Detention Basin SW 1.

The significant nexus determination was coordinated with the USEPA Region 5 for significant nexus coordination, in accordance with Corps and USEPA headquarters guidance entitled, "Revised Guidance on Clean Water Act Jurisdiction Following the U.S. Supreme Courts Decision in *Rapanos v. United States* and *Carabell v. United States*," and the 28 January 2008 Corps Memorandum regarding coordination on jurisdictional determinations. The coordination period ended on 2 January 2014 without comment or objection.