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): 7/27/2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CE-LRP, Terry Cole Well Site, 2016-639

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: PA County/parish/borough: Greene City: Wayne Twp.
Center coordinates of site (lat/long in degree decimal format): Lat. 39 47' 19.51"° **N**, Long. 80 16' 2.05"° **W**.
Universal Transverse Mercator: Northing Easting
Name of nearest waterbody: Tustin Run
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Monongahela River
Name of watershed or Hydrologic Unit Code (HUC): 050200050105 Hoovers Run-Dunkard 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: 7/22/2016
☒ Field Determination. Date(s): 7/27/2016

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 waters[2] (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: 1885 linear feet: width (ft) and/or acres.
      Wetlands: 0.51 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**
      Elevation of established OHWM (if known):1080' (Tustin Run).

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: **Wetland H: (0.123 acres) is a PEM wetland located in the central portion of the site. The wetland is located on a hillslope. Wetland hydrology is sustained by a seasonally shallow ground water table, overland flow from the adjacent upland, and precipitation. At the time of the investigation free standing water was observed at the**

[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.

surface, and a groundwater table was observed four inches below the soil surface. Wetland H drains down the hill to a farm road, where it appears to collect in a culvert, which drains into wetland J (0.01 acre PEM). From there, no clear surface connection was apparent (not even a seasonal one) to wetland G (0.01 acre PEM). Wetland J or G did not demonstrate a surface connection to any other feature. Nearby, there is an erosional feature above tributary 4. However this erosional feature is approximately 50' away from wetland G/J and there was no sign of water being conveyed from either wetland into the erosional feature; even from a large event.

From the erosional feature, water would still have to travel approximately 330' (and through stream 4) before it reaches Tustin Run. There is a topographical feature (bench) at the bottom of the hill that would require an extrememly large event in order for this surface connection to be made before the water travels another 45 river miles through Tustin Run, Hoovers Run, and Dunkard Creek to the nearest TNW.

Therefore, wetlands G, H, and J were found to have no significant nexus

Wetland I (0.144 acres) is a PEM wetland located in the south-central portion of the site. The wetland is located on a hillslope. There are no other jurisdictional or non jurisdictional features within 300' of wetland I. It is situated in a hay field and although it is at the top of a hill, there was no evidence (scour, rills, gullies, etc) of conveyance to the next nearest feature (wetland D) Furthermore, wetland I is 500' or greater from Tustin Run. Modeling shows that it would take greater than a 500 year event to make this surface connection.

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[4] 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: 8901.483345 square acres **Pick List**
Drainage area: 0.796798 square km **Pick List**
Average annual rainfall: 41 inches
Average annual snowfall: 16 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through **3** 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 **30 (or more)** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: To Tustin Run (1mi) to Hoovers Run (4mi) to Dunkard Creek (36mi) to Monongahela River.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: 1st Order.

(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: 3 feet
Average depth: 1 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: scoured banks.
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): <10 %

(c) Flow:

Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **20 (or greater)**
Describe flow regime:

- relatively minor magnitude of discharge
- consistent frequency of occurrence of discharge
- short duration of discharge of a particular flow event
- regular timing or predictability of a defined flow
- experiences quick events, but did not exhibit signs of "flashiness".

Other information on duration and volume: .

Surface flow is: **Confined**. Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☒ clear, natural line impressed on the bank	☐ the presence of litter and debris
☒ changes in the character of soil	☒ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☒ leaf litter disturbed or washed away	☒ scour
☒ sediment deposition	☒ multiple observed or predicted flow events
☐ water staining	☒ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

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

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:

[6]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.
[7]Ibid.

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: water was clear.
Identify specific pollutants, if known: .

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

☒ Riparian corridor. Characteristics (type, average width): >50'.
☐ 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: expected to support macroinvertebrates.

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:
Properties:
Wetland size: 0.51acres
Wetland type. Explain: PEM.
Wetland quality. Explain: emergent vegetation only, no habitat provided, all on slope of hill.
Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:
Flow is: **Ephemeral flow**. Explain: .

Surface flow is**: Overland sheetflow**
Characteristics: .

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: proximity suggests that overland flow is established during large events.
☐ 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 **30 (or more)** aerial (straight) miles from TNW.
Flow is from: **Wetland to navigable waters.**
Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: no definitive chemical characteristic observations at the time of the site visit. But the generla watershed characteristics do not indicate that these systems would be impaired.
Identify specific pollutants, if known: .

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

☐ Riparian buffer. Characteristics (type, average width): .
☒ Vegetation type/percent cover. Explain: 100% hydrophytic.
☐ 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: **10**
Approximately (0.51) 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 A	N	0.028		
wetland B	N	0.038		
wetland C	N	0.069		
wetland D	N	0.017		
wetladn E	N	0.015		
wetland F	N	0.067		
wetland G	N	0.009		
wetland H	N	0.123		
wetland I	N	0.144		
wetland J	N	0.01		

Summarize overall biological, chemical and physical functions being performed: All wetlands are emergent, dominated by sedges and rushes. No real habitat is being provided. All wetlands experience seasonal flow at best. Some filtration and flood water attenuation may be provided.

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: Stream 1 hydrology is influenced by direct precipitation and runoff from surrounding uplands. The stream is 1.5 feet (ft) wide and 0.2 ft deep at the OHWM. The stream is 2.5 ft wide and 1.0 ft deep at the TOB. The stream has clay/gravel substrate. At the time of investigation, approximately 0.5 inches of water was observed within the stream. Stream 1 flows 272 linear feet (LF) to its confluence with Stream 2. Stream 1 indirectly exhibits a significant nexus to the Monongahela River and is therefore considered a WOUS. Stream 1 has the capacity to carry pollutants and flood waters to the nearest TNW. It does not support significant habitat or aquatic species. It does have the capacity to transfer nutrients and organic carbon into the downstream systems. It is 3 stream orders from the nearest TNW.

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: Stream 4 is an ephemeral stream located in the central portion of the LOI. Hydrology is influenced by direct precipitation and runoff from surrounding uplands. The stream is 1.0 ft wide and 0.2 ft deep at the OHWM. The stream is 2.0 ft wide and 0.3 ft deep at the TOB. The stream has a clay/boulder substrate. No water was observed in the stream at the time of the investigation. Stream 4 flows 143 LF until it dissipates into upland habitat and loses bed and bank channel morphology. Stream 4 indirectly exhibits a significant nexus to the Monongahela River and is therefore considered a WOUS. Stream 1 has the capacity to carry pollutants and flood waters to the nearest TNW. It does not support significant habitat or aquatic

species. It does have the capacity to transfer nutrients and organic carbon into the downstream systems. It is 3 stream orders from the nearest TNW.

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 A nearly abuts Tustin Run. It is no more than 10' from the OHWM of Tustin Run and it is in the floodplain. Wetland B and C are topographically situated above Tustin Run approximately 80' from the OHWM. Wetland D, E, and F are nearly 160' above Tustin Run but the slope to the OHWM is 2:1 or steeper. Rills leading from these wetlands to Tustin Run provide more than speculative evidence that during a large event, there is a surface connection between the wetlands and Tustin Run.

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: Stream 3 (Tustin Run) is 7.5' wide and 1.5' deep at OWHM. On average, approximately 6" of water are present in the stream. It is a named, blue-line mapped stream.
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Stream 2 is an unnamed intermittent stream influenced by direct precipitation and runoff from surrounding uplands. Compared to the nonRPWs on site, this stream has a larger watershed size and a deeper channel cut that allows is to receive seasonal baseflow. It is 3' wide and 0.5' deep at OHWM. Two inches of water was observed in the channel at the time of the site visit (July 2016). Stream 2 flows directly into Tustin Run.

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☒ Tributary waters: **1570** linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

3. **Non-RPWs[8] 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: **415** 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.

[8]See Footnote # 3.

Provide acreage estimates for jurisdictional wetlands in the review area: **0.234**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.
☒ 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: **see section IV(B).**
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

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

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

☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 0.287 acres.

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[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.*

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: .
- ☒ 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:7.5 Minute Series Holbrook Quad, PA.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation:SSURGO Data Base.
- ☒ National wetlands inventory map(s). Cite name:USFWS 2012 - Web Mapper.
- ☐ State/Local wetland inventory map(s): .
- ☒ FEMA/FIRM maps:42059C0295D.
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☐ Photographs: ☒ Aerial (Name & Date): .
  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): .

B. ADDITIONAL COMMENTS TO SUPPORT JD:

ISOLATED:
Wetland I: (0.144 acres) is a PEM wetland located in the south-central portion of the site. The wetland is located on a hillslope. Wetland hydrology is sustained by a seasonally shallow ground water table, overland flow from the adjacent upland, and direct precipitation. It is approximately 270' from the next nearest jurisdictional resource (wetland D) and over 500' from Tustin Run. Site investigation determined that there is no non jurisdictional feature that conveys water from weland I down the hill to any other jurisdictional resource.

NO SIGNIFICANT NEXUS:
Wetland G: (0.010 acres) is a PEM wetland located in the central portion of the site. The wetland is located on a hillslope. Wetland hydrology is sustained by a seasonally shallow ground water table, outflow from Spring 4, overland flow from the adjacent upland, and precipitation. Spring 4 is a developed groundwater spring located within Wetland G. Spring 4 was developed for livestock watering purposes and is a persistent groundwater outlet.

Wetland H: (0.123 acres) is a PEM wetland located in the central portion of the site. The wetland is located on a hillslope. Wetland hydrology is sustained by a seasonally shallow ground water table, overland flow from the adjacent upland, and precipitation.

Wetland J: (0.01 acres) is a PEM wetland located in the central portion of the site. The wetland is located on a hillslope. Wetland hydrology is sustained by a seasonally shallow ground water table, outflow from the culvert underneath the adjacent road, overland flow from the adjacent upland, and precipitation.

Wetland H drains down the hill to a farm road that bisects the hill and acts as a bench. Water appears to collect in a culvert, partially form wetland H (inlet was covered by a small slip at time of site investigation), which drains into wetland J (water was flowing out of the culvert and served as the primary hydrologic source for wetland J). Through all of this there is a clear surface hydrologic connection. From the wetland J, water would have to travel downhill 50' to reach wetland G; which sits at the top of the erosional feature above stream 4. From wetland H, this point is 200' away. There was no erosion or breaks in vegetation below wetland J. Water did not appear to be connected on the surface to any other feature from wetland J. From wetland G to the top of the stream 4 boundary, it is another 200'. This 200' is downhill at an approximate 3:1 slope and there is erosion occuring throughout the feature. However, site investigation determined that there is no change in the soil type, and vegetation/leaf litter were present in the 200' erosional feature. Water did not appear to flow from wetlands G, H, or J through the erosional feature to stream 4 with any frequency. Furthermore, stream 4 dissipates into upland habitat and loses bed and bank channel morphology at the bottom of the hill. It would take an extrememly significant event (at least 100yr) for a surface, or even shallow groundwater hydrologic connection to be made to Tustin Run. If a large event were to occur, and wetlands G, H, and J demonstrated a surface connection to Tustin Run (over 600' away), the physical, chemical, and biological effects would have to be felt over 45 miles away to the nearest TNW (Monongahela River). Because of the volume of discharge from the relatively small wetlands (total of 0.143 acre), this unlikely connection/contribution would not be significant.